THE CASE AGAINST BIMETALLISM

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THE CASE AGAINST BIMETALLISM

BY

ROBERT GIFFEN

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NOTE.

Some of the following essays, which were originally published in newspapers or magazines, being now reprinted for the first time, I desire to state that this has been done with the permission of the editors of the journals concerned, and I have also to acknowledge the courtesy of the communications I have received on the subject. I refer here particularly to the letters to *The Times*, forming Chaps. IV., V., VI., and VII. of this volume, and the contributions to the *Nineteenth Century*, forming Chaps. III. and VIII. The dates of original publication, in each case, are stated at the beginning of the chapter.

R. G.

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BIMETALLISM.

INTRODUCTION.

THE accompanying essays contain the greater portion of my writings on bimetallism since 1879, when I first touched the subject. It may be expedient, therefore, to begin by a few words of introduction, explanatory of the connection between the different essays.

At first when I wrote on the subject, and until about two years ago, the object in view was not to argue against bimetallism, on the main issue between it and monometallism, viz., its possibility; but, assuming that the case against it had been settled generations ago, to point out the dangerous tendencies of bimetallic literature, on account of the erroneous ideas pervading it as to the functions of the State in dealing with money, the nature of money itself, the nature of the evils inflicted by imperfect monetary systems, and the extent of the benefits to be expected from currency improvements. Bimetallists, it seemed to me, were using exactly the same sort of language which is used from time to time by other currency faddists, and it was the object of these essays to correct the insanity of

the language, and show how, in associating with their fanatical friends, the more sober of the English adherents of bimetallism, who thought there was something in it on scientific grounds, had got far astray from sound monetary tradition. I still think that for practical purposes it is most important that this mischievous feature of bimetallic literature should be insisted on by those who write on the subject. Even if there were something in bimetallism, the whole character of the arguments of writers like Mr. Ernest Seyd, M. Cernuschi, M. de Laveleye, and many others, not to speak of the rank and file of adherents who talk mere nonsense, like the speakers on American platforms and in the American House of Representatives, is essentially tainted and unsound. No right conclusion can be come to by those who use the common arguments.

In the course of the discussion, however, and more particularly after the appearance of the Report of the Royal Commission on Gold and Silver—which contained some most unlooked-for blunders—I was led to discuss the arguments on the main issue against bimetallism, and thus to go back into a field which already had been fully occupied by English economists, statesmen, and writers on money, from Sir William Petty and Locke, two hundred years ago, to Adam Smith and Ricardo, at the end of the last and beginning of the present century, to Sir Robert Peel, half a century ago, and then down to Jevons and Bagehot, in more recent years.

The effect is that the essays are not in the order which would have been adopted in a systematic treatment of the subject. If I had had time and strength, I should have endeavoured to recast them; but this is not possible for me, and an introduction like the present becomes necessary.

The first essay, then—which I have now called "The General Case against Bimetallism," and which, when it was first published in 1879 in the *Fortnightly Review*, was simply described as "The Case against Bimetallism"—deals with the whole argument from the point of view of the disorder and extravagance of bimetallic literature, and on the assumption that the main issue, to which I made the briefest reference in passing, had long since been decided. The reference is there, but the main topic is the extravagance of the language and argument of bimetallists as currency faddists.

In my next contribution to the subject—which consists of a paper read at the Bankers' Institute in 1886, entitled, "On some Bimetallic Fallacies"—the topics are for the most part much the same. The main fallacy dealt with is the notion that the objects of the bimetallists come properly within the functions of the State. The chief portion of the main issue which is touched is the assertion of bimetallists that bimetallism was successful in France between 1803–73, and kept gold and silver steady throughout the world in those years. On this head there is an examination and statement of the facts, so far as then known to me, which seemed conclusive against the bimetallic con-

tention; but the paper, nevertheless, largely deals with the inadmissibility of bimetallism to serious discussion.

The third essay in the book—"A Problem in Money"—is in form and substance, for the most part, not an attack on bimetallism, but a statement of the true theory of the connection between money and prices, which is converted by application into an attack on the bimetallic position, because that position involves an unsound assumption regarding the nature of money itself. The essay would have been written without any reference to the bimetallic controversy, if that had been possible. The problem as to the manner in which the ratio of exchange between a commodity used as the monetary standard and other commodities is fixed, is obviously one of permanent scientific interest in these days, when credit is wonderfully developed and the standard substance itself is hardly handled at all in the wholesale transactions of business. I was the more desirous to write the application because much that I had said in various investigations as to prices had been wrested from its true meaning by bimetallists, who applied my remarks to money as they confusedly understood it, instead of observing that there is "money" and "money," and that they were using the word "money" in a sense in which I had not used it. But the application, nevertheless, is only a pendent to the essay, not an essential part of it, and I am desirous that the essay should be read from that point of view—it is not primarily an essay on bimetallism.

In the next essays—"The Inevitable Results of Uni-

versal Bimetallism," "M. de Laveleye on Mint Price," and "The Alleged Bimetallism of France," in 1803–73 —different points in the main bimetallic theory are directly assailed. The occasion of these essays was the unfortunate impression that was being produced by the weak admissions, on certain points, of the members of the Royal Commission on Gold and Silver, who were supposed to be representative monometallists. I believed their admissions to be entirely inconsistent with the foundation of the English monetary system, and the use that was being made of them would probably have grown to be most mischievous if no corrective had been applied. My object was to demonstrate that Locke's conclusion as to the impossibility of a bimetallic standard because it was impossible to fix a price between two things, was as applicable to the attempt of many or all Governments to fix the price as it was to the attempt of one, although the Commission were in doubt, and that the assumptions that France was practically bimetallic in 1803–73, as it had a bimetallic law, and that to this bimetallism was due such a fixity of price as made a bimetallic standard possible, were both untrue. In the course of the controversy M. de Laveleye intervened and set forth the ordinary ideas of the currency faddist about the Mint price of Gold, which came very opportunely for me, when economists like Mr. Foxwell were trying to put as decent a dress on the bimetallic theory as they could.

One of these essays—that on the "Alleged Bimetallism of France in 1803–73—repeats and develops, it

will be observed, the argument on the subject in the second essay on "Some Bimetallic Fallacies."

These three last essays, along with "A Problem in Money," contain almost all that I have to say on the direct issue between bimetallism and its opponents. To myself the case has always seemed so conclusive that I have never cared to elaborate it. If I have taken up some of the points fully at any time, as in "A Problem in Money," it has been on account of the independent interest of the subject, apart from its application to bimetallism.

The next two papers—"Unsaleable Silver," and "The American Silver Bubble"—relate to the practical aspect of the bimetallic question as it has been presented in recent years. So much has been made of the opposite practice of the Americans as regards bimetallism or "silver," compared with our own, and their example has been so confidently held up to us as worthy of imitation, that an exhibition of the monetary quagmire into which the Americans have been plunged by their adherence to unsound theories of money, seemed expedient. The first of these papers was written in reply to a suggestion of the Duke of Marlborough consequent on the essay on "The Inevitable Results of Universal Bimetallism," and was published on December 31, 1889. The second appeared in the autumn of 1890, when the American silver bubble was nearly at its highest degree of inflation. America is the great example of the evils of a bad monetary system, and it was fortunate for the public, though unfortunate for their own arguments,

that bimetallists said so much as they did about the American example.

The last essay of all—"A Chapter on Standard Money"—sets out at length the view as to the nature of money which is implicit in most of the previous essays, and which it appeared expedient to make explicit, as the controversy made it more and more apparent that bimetallists started with a theory of money which is not only not the theory of the English monetary system, but which has been expressly and emphatically—and even contemptuously—repudiated by the most eminent economists and statesmen in England who have dealt with the subject. Bimetallists in fact have made it necessary for us to go back to first principles, to begin at the beginning, with the beggarly elements of money and currency. This must be my excuse for inserting so elementary a chapter in a book on bimetallism; and for making it last, instead of first, which would perhaps have been the more natural order.

Generally, then, the connecting threads of these essays are, first, in the earlier essays, an attempt to exhibit the extravagance and intemperance of idea among bimetallists regarding money and currency, this extravagance and intemperance being characteristic of the currency faddist; and next, in the later essays, an attempt to explain and support the main propositions of the adherents of a monometallic standard as the only sound foundation of a monetary system. Two essays—the one on "Unsaleable Silver," and the other on "The American Silver Bubble"—have both these

connecting threads running through them, and although among the last in point of time, they perhaps rather belong, as regards subject, to the earlier series. With these notes I must now leave the essays themselves to the reader.

I.

THE GENERAL CASE AGAINST BIMETALLISM.*

THE fall of silver during the last few years has produced a large crop of that dismal currency literature which has brought almost all writing on currency into disrepute. The distinguishing feature of this literature is the constant assumption that some small defect in a currency which has all the recognised essentials of a good money—a basis in one or other of the precious metals, identity of the standard coins with a certain weight of that metal, and security for free coinage with only a small seignorage, or with no seignorage at all—may be productive of monstrous evils; or that a small manipulation of the currency, even at the risk of violating one of the essentials, may have some vague and indefinite advantage. It would be useless to enumerate the various schemes, of which the most prominent has perhaps been the proposal generally known as Colonel Smith's, to raise or restore the rupee coinage of India to a level in value with gold. They are sufficiently answered by the common sense of the monetary world, which demands, in this question, merely that a Govern-

* Originally published in the *Fortnightly Review*, 1879.

ment should authorise a coinage having the essentials above described, arrange for the coins being legal tender and receivable in taxes, and for the rest leave the matter alone. But there is one theory or system which has to a certain extent commanded more respectful attention than the others, viz., the theory which is known by the name of bimetallism. In its best form this theory is not open to the charge of artificiality, and of being inconsistent with free mintage, to the degree that some of the other schemes are open to the charge. The idea is that a State, instead of having the basis of its money in one of the precious metals only, should declare money obligations to be solvable by either of the two metals, silver and gold, in prescribed quantities, still permitting free coinage. The theory, therefore, has gained adherence even from people who have little enough sympathy with the way in which currency writers exaggerate the possible evils of slight derangements in the currency, and look for impossible advantages from currency changes. I wish, then, to put together some observations on this bimetallist question, and account, if possible, for the dislike of bimetallic theories which is entertained as a rule by those who have carefully studied the English monetary system. Bimetallists are often treated, like other currency prophets, as inventing or grossly exaggerating the evils produced by the choice of monometallic systems in preference to theirs, and as aiming at benefits which cannot possibly be derived from any currency change. Is there real cause for this dislike or for the con-

tumelious treatment which bimetallist advocates, who comprise among their number not a few men of real eminence as economists and statisticians, not infrequently receive?

It will be expedient to begin with a short account of the bimettalist arguments. Up to a certain point monometallists and bimetallists—at least the more able of the latter—are really agreed. They hold to the common-sense doctrine of currency already referred to—that it is not an arbitrary thing to be regulated at will, but that a Government fulfils its duty in selecting one or two of the metals as money, receiving all that is brought to them, impressing upon them certain stamps denoting their weight and fineness, and declaring them receivable for taxes, if not legal tender in release of all obligations expressed in money. Where they part company is on the point whether a Government should have one metal only, or two or more metals, for its standard. Monometallists affirm that there should only be one, and even that there *can* only be one; bimetallists that there may be two, the law establishing the indifferent employment of certain prescribed quantities of one or the other, and that it is desirable two and not one should be used. In support of the view, bimetallists maintain that legalising the use of both metals as a standard will procure certain advantages which are not procurable with one metal only. Such a regulation, it is said, would have the effect, first of all, of keeping more money in use than would otherwise be the case. Money would be more abundant than

with one metal only, and abundant money is good for trade.* It is no doubt admitted now that unless all Governments and communities have the same money regulations, the legalisation of the use of both metals will not have the effect of keeping both in use at one time in a particular State. On the contrary, the debtor will always pay in the metal which it is easiest for him to obtain; a very slight fraction of difference in procuring the prescribed quantity of the one, as compared with the prescribed quantity of the other, will drive the dearer metal out of use. But any inconvenience arising from this alteration, it is said, is amply compensated for by the greater abundance of money generally in which all countries participate.† Another alleged superiority in the use of the two metals as compared with the use of one only, is the increased facility of exchange between different countries. The legal ratio of use, it is said, tends in fact to keep the metals nearly at the corresponding relative value, so that exchanges

* See Wolowski's 'L'Or et l'Argent,' pp. 331–2, where M. Wolowski quotes Count Daru's argument for the famous law of 1803, giving France the system of bimetallic money, which it retained till within the last few years. Daru says: "En réduisant l'or à n'être qu'une marchandise, on diminuerait la masse du numéraire, on gênerait le commerce," &c., &c. And this language is still of the essence of the bimetallist argument.

† This is the modern account of the argument. But, so far as I can judge, the authors of the French bimetallist law, as of former bimetallic experiments, really hoped to retain both gold and silver in use in their own country. They thought they had found a ratio from which the metals would not vary for a long period, and in the original draft of the law a revisal of the ratio was contemplated. See Wolowski, 'L'Or et l'Argent,' p. 295.

between countries not bimetallic themselves, but some of them having gold and others having silver, become almost as steady, through the help of the bimetallic regulations of other countries, as if only one metal were universally in use. This facility would be enhanced by several nations becoming bimetallic, and still more by all nations adopting that system. This is the general theory of bimetallism, and it is supported by practical arguments from present circumstances. The depression of trade of the last few years is by some held to be accounted for by the scarcity of money due to the demonetisation of silver, and greater pressure upon gold; and by the confusion introduced into the exchanges by France (which has played the *rôle* of intermediary between gold and silver countries during the present century) abandoning its bimetallic regulations. By others who do not go so far, the actual evils of the last few years, especially through the derangement of the exchanges, are said to be so great as to require a special remedy such as bimetallism would give. Finally, it is held by some ardent enthusiasts in the cause that there is a providence in the matter; that not only have two metals adapted for use as money been provided, but that a certain ratio—viz., $15\frac{1}{2}$ to 1—tends naturally to be established between them. A bimetallic law fixing this ratio of $15\frac{1}{2}$ to 1 merely confirms an ordinance of nature! Such is a fair account, I believe, of the bimetallic argument, and the last point in it, I may observe, is not inserted by way of caricature, but in order not to leave out any

principal argument on which leading bimetallists lay stress.

What we have to inquire into, then, are the objections of monometallists to this argument. Is there any real foundation for the superiority to monometallism alleged? and are there no counter-considerations? How far is bimetallism even a practicable scheme? I would begin by saying that the whole onus of proof is on bimetallism. Not only is the opposite system installed, but that system has the merit of simplicity. No one can say that if only one metal had been in existence suitable for use as standard money, the world would have been badly off because there were not two. The controversy is also a comparatively modern one. What Governments had to debate before the present century was not any real choice between one and several metals for use as standard money, but how to get a sound metallic currency of any sort. Their difficulties were the temptation to make a profit for themselves at the expense of their subjects by debasing the coin or "raising its denomination" (which comes to the same thing), and the natural difficulty of keeping the bullion contents of a coinage up to the nominal value assigned to it. It is only since 1696 in England, and since the beginning of the present century elsewhere, that Governments have learnt the wisdom of resisting the temptation to debase—if even yet the lesson has been perfectly learnt; and the effectual method of meeting the difficulty caused by wear and tear is of equally recent discovery. The alleged advantages of bimetallism, therefore, are supple-

mentary only to the primary advantages aimed at by a good currency. A people afflicted with debased coins, whether the debasement was due to natural or artificial causes, would plainly be only too glad to get a good metallic currency of any sort. This of itself is almost enough to prove that there is a fundamental exaggeration in the bimetallist argument. Why is there so much importance attached to matters which could not have been thought of when nations were struggling with the real difficulties of coinage?

Even when these real difficulties existed, it may be remarked, though the social misery and nuisance were intolerable, and there was some hindrance to trade, it was possible for countries to make great advances in material prosperity. Speaking of the seventeenth century, when, as we shall see, the country was afflicted with debased and constantly changing coinage, and when there was, besides, a long period of civil war and confusion, Lord Liverpool, who was, above all statesmen, alive to the evils of a bad currency, remarks: "It is certain, however, that during the whole of this period, when our coins were in so great a state of confusion, the commerce of the kingdom was progressively improving, and the balance of trade was almost always in favour of this country."* It seems impossible, therefore, that bimetallic money can be so necessary to the world as is alleged, when countries got on so well as they did with money so inferior, that the question between bimetallism

* Lord Liverpool on the 'Coins of the Realm,' p. 120.

and monometallism could not arise, attention being absorbed in more serious matters.

But let us examine directly what the argument comes to. One of the two points of superiority alleged may, I think, be passed over as hardly counting, or rather as counting against those who use it as an argument for bimetallism. This is the allegation that bimetallism increases the quantity of money in use as compared with the opposite system. It cannot be true that it will have that advantage necessarily—that is, if there is any advantage in the matter. Clearly as much gold and silver may be in use as money throughout the world, if some nations have gold and others silver, as if some or all were bimetallic. The quantity of money in use might be diminished by all nations becoming monometallic and using the same metal; and were this to be done suddenly, great evils might ensue. I believe evil has ensued from the haste to introduce gold in place of silver in some countries which prevailed ten or fifteen years ago under the influence of eager advocates of a universal gold money. But this diminution of the money in use is obviously not a necessary consequence of monometallism. It would be rather the result of an injudicious application of the principle which the nations of the world are not now likely to be guilty of.

And the argument turns against bimetallists in this way, that by attaching such great importance to keeping money abundant, they ally themselves with the most vicious of currency theorists. It is not true that the

quantity of money, apart from the possibly mischievous effects of any sudden change, socially and otherwise, can affect materially the real wealth and welfare of an industrial community. It is a mere truism to say that while it may be useful to the world for other purposes to have gold and silver more easily obtained than they are, yet, so far as their use as money is concerned, they would be equally serviceable if they were only half as abundant. The bimetallist argument is accordingly tainted, and this accounts very much, I believe, for the extreme disgust and dislike of the theory which economists and statesmen have shown. The prophets who prophesy that the world is to be enriched by abundant money are the detestation of men of sense.

Has not the scarcity and appreciation of gold, it may be rejoined, something to do with the present depression of trade? To this I would reply that the depression is mainly traceable to many other well-known causes of such phenomena, so that the scarcity of gold can only have been a contributory cause. In any case, moreover, the temporary effects of a change in the supply or demand for a particular kind of money causing a general change in the level of prices are not to be confounded with the permanent effects of scarce or abundant money. At the new level of prices established the scarcity and abundance of money may become what they were before. However much, therefore, the scarcity of gold may have contributed to the recent fall of prices, and through that to the depression of trade,

it does not follow that the effect will be continued, or that trade will be permanently contracted. A less number of gold and silver pieces at low prices will serve for the same exchanges as a larger number at higher prices. It may be added that it was never proposed by the great English writers on currency—Locke, Harris, Lord Liverpool—to prevent the fluctuations of one of the precious metals in reference to itself at different periods. If other fluctuations were got rid of, those in the metal itself were not reckoned as of great importance, while they were considered to be inevitable. It may be said, perhaps, that abundant money is of more consequence now than it was a century or two ago, because the effect of any given quantity of money is now multiplied by our system of credit. But I fail to see how the constitution of our system of credit makes any difference adverse to the conclusion of Lord Liverpool and the old authorities. Rather we have now a constant demonstration that moderate changes in the quantity of money in use, unless they are suddenly made, are not material. In consequence of changes in credit alone, the serviceableness of the same quantity of money varies indefinitely in comparatively short periods; the scale of prices is in constant oscillation; no conceivable changes in the quantity of money itself could at all have the effects which are constantly being produced by changes in credit alone.

To come to the other alleged superiority of bimetallism the facility of exchange, we find there is again a good

deal of exaggeration. The benefits of great facility of exchange may themselves be readily exaggerated. We may look only how trade has been carried on with inconvertible paper countries, and with enormous fluctuations in exchange. The fluctuations are, no doubt, an evil, and a serious one; but in a question of the relative advantages of two systems of money, we must see exactly how great the evil is. Even serious evils may have to be endured, because relatively they are unimportant compared with the great objects proposed in a sound currency. Moreover, the question of exchanges concerns only the foreign trade of the countries affected, that trade being at most a fraction of their whole trade. Whatever injury great fluctuations of exchange may inflict, they can only do so by hindering the development of a part of the whole trade of a country—even in this country perhaps only a sixth or an eighth part of its trade. Naturally, and in the long run, too, it results from the nature of gold and silver as money, and the magnitude of the stocks in existence, that exchanges between countries using gold and silver will be steady without bimetallism. There may be rapid fluctuations at particular periods, as there have been lately, and as there were in 1850, when great changes in the supply of particular metals and in the demand for them occur. But such great changes, unless all nations lose their senses, are not likely to be of frequent occurrence, and in ordinary times exchange will be steady. The reason is that as neither gold nor silver is likely to change greatly with reference to commodities in general, this

being the cause of their selection for use as money, they are not likely to change with reference to each other. Accordingly, we find that in past times, without bimetallism, exchanges have been steady for long periods together. I would refer especially to the course of exchange between France and England from about 1820 to 1850. During all that period France was practically a silver-using country. Silver being cheaper than the legal rate, and tending to become cheaper still, had expelled gold from circulation, till in 1848 the Bank of France had hardly any gold left in its till. French bimetallism, therefore, could not have prevented a further fall in silver. "Ten years ago," says M. Leon Faucher, writing in 1852, "every one was frightened at the prospect of the depreciation of silver." But notwithstanding this inoperativeness of bimetallism, the price of silver and rate of exchange between France and England remained almost as steady as they have done since, although bimetallism afterwards came into operation through gold becoming cheaper than the legal ratio fixed and the bimetallic countries having a great quantity of silver to be exchanged for it. Thus fluctuations in exchange are neither so formidable to trade as they are frequently represented, nor are the exchanges so likely to be unsteady, as a rule, without bimetallism as its advocates have been in the fashion of maintaining.

The fluctuations with bimetallism may also be considerable. Bimetallism of some sort was the attempted practice of the world for centuries, but this did not

prevent great fluctuations in exchanges or the price of silver. Lord Liverpool, writing in 1805, says—

"The price of silver in dollars has varied in twenty-two years, that is, from the end of the year 1774 to the 31st of December, 1797, $11\frac{11}{17}$ per cent., and even in the course of one year, that is the year 1797, no less than $9\frac{1}{6}$ per cent. The variation in the price of silver bullion appears to have been still greater, by another account, with which I have been favoured, by the late Mr. Garbett, an eminent merchant and manufacturer at Birmingham; it there appears that the silver purchased by him, as a refiner, with bank notes, varied, according to his calculation, in the course of ten years, to 1793, more than $19\frac{1}{4}$ per cent., and in one year only more than $13\frac{1}{3}$ per cent." *

Apart from its bearing on the particular point in hand, this quotation may, perhaps, be useful in convincing people that great fluctuations in silver or in exchange with silver-using countries, are not so novel as they have lately been assumed to be.

What, then, is the increased steadiness of exchange which bimetallism can give? And of what advantage will it really be? The answer to the first question appears to be that, in certain circumstances, in some countries, bimetallic regulations would help to steady the exchanges. When a change in the relative value of the two metals is occurring *in the direction of making the less valuable the more valuable,* and when the bimetallic country possesses the metal which is becoming appreciated, bimetallism may help to steady the exchanges. The metal becoming cheaper pours into the country to be exchanged for the metal becoming dearer, and so the rise in the latter and fall in the former are

* Lord Liverpool on the 'Coins of the Realm,' p. 150.

arrested. Of this the world had a conspicuous illustration after the Australian and Californian gold discoveries. Silver, from being cheaper, became dearer than what was fixed by the legal ratio between silver and gold in France; and as France had much silver to be exchanged for gold, the rise in silver and fall in gold relatively to each other were arrested.* Gold was poured into France and exchanged for silver, the process continuing for many years. More lately an opposite process was beginning, silver, as it lately fell, being sent back to France in exchange for gold, when a stop was put to the proceeding by France suspending the free mintage of silver. But it is only in such transition periods that bimetallism can have any effect. Suppose a change, not in the direction of making the cheaper metal dearer than the other, but in the direction of making it cheaper still (the chances of the one event being exactly equal to the chances of the other), bimetallism, it is plain, can have no influence of any sort. It is powerless to arrest the fall, because the bimetallic country has *already* got the cheaper metal, and has none of the metal which is becoming dearer to exchange. As already mentioned, this was precisely the case in France for many years before 1850. If silver had become abundant then as now, as there was at one time, it appears from the above-quoted statement of M. Leon Faucher, reason to think it would be, there was no gold in France to be exchanged for it to arrest the fall. It is not true, then, that bimetallism has a

* See *postea*, p. 126.

general effect in steadying the exchanges. A country which adopts it must expect that it will only operate in that way in certain special circumstances, and those circumstances may never occur.

It may be said, perhaps, that if many countries were bimetallic, the steadying effect would be greater. But this is clearly not the case. If all bimetallic countries had the same ratio, and the cheaper metal tended to become still cheaper, they would simply be as one country. The fact of their being many would give them no more power over the exchanges than if they were one country, and their power would be precisely that of monometallic countries. Of course, if all countries were bimetallic, supposing that to be a possible arrangement, exchanges would be steadier, just as they would be if all were monometallic upon the same basis. So much may be granted on this head to the bimetallist argument.

But what would be the advantage of this increased steadiness of exchange? As we have seen, the exchanges in any case are likely to be fairly steady; great fluctuations, when they do occur, are not so harmful to trade as they are often supposed to be, while foreign trade, after all, is only a fraction of the business of great countries. In any case, unless there is universal bimetallism, bimetallism will only help to steady the exchanges in certain circumstances, and will have no effect in other circumstances which are just as likely to occur. Can the increase of steadiness which bimetallism may give, therefore, be worth any great

price, so long as there is no universal bimetallism? Is universal bimetallism worth aiming at for the sake of mere steadiness of the exchanges? I cannot but think that, when really looked at, the alleged superiority of bimetallism in this respect, as in regard to its promise of more abundant money, amounts to very little.

But what of the great evils sustained by the Indian Government through the fluctuations of silver and the exchanges? by Anglo-Indians who receive salaries in India and have to remit in gold? and by banks, insurance companies, and others who have invested in Indian securities? Is it not desirable, to obviate these evils, that bimetallism should be made to operate as far as possible—that is, in the circumstances when it will steady the exchanges—and that there should also be universal bimetallism? To this I would reply that, so far as the Indian Government is concerned, and the Indian community generally, the evils of the fluctuations which have occurred have been enormously exaggerated. The difficulty of the Indian Government and people, so far as it is a real one—that is, so far as the changes between silver and gold impose any additional real burden on the Indian community, which can only be if gold has appreciated—will not be affected at all by India becoming bimetallic. The Indian Government would receive silver just as they now receive it, and this would not help them with the increased real burden of their gold payments. England might help India by becoming bimetallic, and so

arresting the rise in gold or fall in silver, because England has much gold to exchange for silver;* but this would be gratuitously altering our monetary system for the sake of a temporary advantage to India. If gold, on the other hand, has not appreciated, and silver has really depreciated, the difficulty even of the Indian Government can only be transitory, pending the adjustment of all prices and payments in India. As to Anglo-Indians who receive salaries in silver and have to remit in gold, their case is no doubt a hard one, though to some extent the hardship is exaggerated. They are not worse off than annuitants were in this country after the gold discoveries, when all prices rose and their salaries or annuities did not. Here, again, to introduce bimetallism would be to make a permanent alteration in a monetary system to meet a temporary evil. Much the same may be said of the question of investments by banks, insurance companies, and others, in silver securities. They have suffered a temporary loss at a time of great fluctuation, and at the present moment there is a difference of about three-eighths in the rate per cent. which the Indian Government has to pay on its rupee compared with its sterling loans, showing the premium which investors here charge for the additional risk of an investment in a silver security compared with a gold security. But as the exchanges become steadier even this premium will, no doubt, diminish. It cannot be said that the flow of capital from gold to silver countries is seriously checked by the want of bimetallism.

* I should not now say *much* gold. See *postea*, p. 123.

Yet another advantage is alleged for bimetallism, viz., that the standard of value set up by it will probably be more stable from period to period than a standard of one metal only. And on the doctrine of chances it would seem there is, perhaps, some foundation for this statement. There is some probability that the chances of one metal fluctuating in value in reference to itself from period to period, will be partly compensated in a double standard system by the chances of the two metals not fluctuating in the same direction. But in this matter, it seems to me, the doctrine of chances is not a sufficient guide for action. The preponderant probability, on one side or the other, is not very great —it appears something like two to one in favour of bimetallism; whereas, for a guide to action, the probability should be so great as to amount almost to certainty. The assumption on which the doctrine of chances is appealed to is, moreover, not quite warranted. In real life, it may be assumed, nations will not be constant in their monetary arrangements. In the future, as in the past, changes of price, political aspirations, the love of imitation, and hundreds of other motives, will induce one nation to change gold for silver, or silver for gold, or to give up bimetallism for one or the other metal. The result may well be that, after a long lapse of years, the change of one metal in value in reference to itself will be no greater than the change in the combination of the two. In any case the differences over long periods in the relative stability of monometallic and bimetallic standards of value hardly seem an object worth any great concern to a State.

So much for the negative criticism of the alleged superiorities of bimetallism to the opposite system. But there is another side to the criticism. May there not be positive defects in the bimetallic proposal which would counterbalance even greater advantages than any that seem to be promised?

As far as what may be called particular bimetallism is concerned—that is, the bimetallism of one or two countries only, as distinguished from universal bimetallism—there can be little dispute, I believe, of the existence of such great defects. For particular States to be bimetallic is, in fact, to condemn themselves to the misery and nuisance of constant alterations of the money in use. M. Wolowski argues that this is a minor matter, alleging that a country like France suffers nothing by constantly changing its money in use; but history is against him. Since he wrote, France has shown its practical fear of the consequences of bimetallism by suspending its silver coinage, and this was only in accordance with the previous experience of other countries. Lord Liverpool dwells upon this misery at certain periods in English history, as one of the reasons which decided him against a double standard. Those who have any curiosity in the matter may be referred to Lord Liverpool's treatise (p. 57 *et seq.*), but the following summary may give some idea of his argument:—

"The evils resulting from the fluctuations in the relative prices of these metals do not appear to have shown themselves in any great extent, or at least to have been the subject of general com-

plaint, till the reign of James I. At this last period these evils were felt in a most alarming degree. . . . In the first years of the reign of this monarch, the complaints of the exportation of the gold coin, on account of the low value at which gold was then estimated at the English Mint, compared with the value at which silver was then estimated, were great and incessant. To remedy this evil, King James raised the value of gold in his coins by successive proclamations, but he at last raised it beyond the due proportion; so that during the remainder of his reign, and the whole of the reign of Charles I., the silver coins were in their turn exported, and a very small quantity of these last remained in circulation. The complaints of the want of silver coins were then as great as the complaints of the want of gold coins had been before. During a short period in the middle of the seventeenth century, the relative prices at which the precious metals were estimated at the Mint in our coins, appear to have been in a sort of equilibrium, or to have maintained a due proportion with the prices at which they respectively sold in the market. But in the fifteenth year of the reign of Charles II., that is, in the year 1663, when a new estimate was made of the relative value of gold to silver at the English Mint, that of gold was underrated. . . . A general coinage took place by the advice of Parliament in the reign of King William III. After this recoinage the gold coins passed in payment at a higher value than that at which they were still rated in the Mint indentures, or than the relative value of gold to silver at the time would justify; not, however, by authority of Government, but by the general consent of the people. The consequence was that the new silver coins began immediately to be melted down and exported, notwithstanding the very great charge which the public had incurred in recoining them. A very considerable part, in the course of not more than seventeen years, had disappeared, and there was found to be a want of them in circulation. The same deficiency in the number, as well as the weight of the silver coins, has remained to the present day, to the great inconvenience of your Majesty's people. From the beginning of the reign of James I. to the period of which I am now speaking, gold and silver coins were alternately exported, for the reasons just stated, to the great detriment of the public, as often as individuals could profit thereby." *

* Lord Liverpool on the 'Coins of the Realm,' pp. 117, 118.

These were the practical reasons given at the beginning of this century for adopting a single rather than a double standard, and the mere statement, confirmed as it has been by the subsequent experience of France, is enough. No country will endure the misery and nuisance of the incessant change, and M. Wolowski's allegation to the contrary is singularly unfortunate. In England especially there is a special reason against the alternation in its expense. There is no seignorage on the standard coin at the English Mint, a feature of importance in our monetary system. Whether it is good or bad, it would have to be abandoned in a bimetallic system. It could not be proposed that the expense of an incessant recoinage should be thrown on the country.

To some extent the misery inflicted by these alternations appears to arise from their depriving the people of the peculiar sort of money they want, so that bimetallism really thwarts the natural inclination of communities in choosing their money. It is a procrustean rule under which the State forces, or attempts to force, an overrated metal into use, so that a country wishing to have gold may be made to take silver, and *vice versâ*. That nations have their wishes in such matters is not only proved incidentally by the continual outcries in England in the seventeenth century, but by numberless facts, such as the difficulty Germany now experiences in keeping the gold it has acquired at so much expense and disturbance to the money market, the refusal of California to take greenbacks in the American Civil War, the liking of

the Americans and of almost all English-speaking communities for gold rather than silver, the difficulty of floating a note-circulation in India, the preference in Scotland and Ireland for £1 notes to sovereigns, and other phenomena of a similar kind. The most significant event of the sort, however, was perhaps that adoption of gold by England after 1696 in place of a new silver coinage by the free choice of the people without its being legal tender, described in the above quotation from Lord Liverpool. Those who talk of legislation being able to constitute a demand for money, and being all that is necessary to do so, may be referred to such facts as these. Bimetallism, proceeding on the same assumption, also stands condemned by the facts.

It may be urged that now it cannot matter to a nation which metal it employs for a standard, because the real standard is now bullion only, and all the coins in use are substantially token coins, used only for small change, whether they are of gold or silver. Mr. Lowe's scheme, as described in the *Fortnightly Review* of last month,* also assumed that standard coins of gold could be dispensed with. But it may be doubted if, even in England, we have yet got to the stage of wholly dispensing with coins in use of the standard metal. For travelling, and for settling minor balances between countries, gold coins and not gold bullion only are still useful, as silver coins or silver bullion would not be. Apart from this, the greater convenience of gold for storage and for the handling of banks and other insti-

* July, 1879.

tutions which have to deal in it, would make it naturally to be preferred by the richer countries; and, whatever may be the case here, it is quite certain that many nations are still in a state to require coins of the standard metal in use, and particularly the silver-using countries. So far as such preferences still exist, bimetallism would tend to thwart them. It would at times create in a country which naturally likes silver, a premium on the export of that metal; and at other times, in countries which preferred gold, a premium on its export. This would be obviously a daily and hourly drawback to bimetallism, if any country thinks of adopting it, to be set against the possible advantages it may confer. It will be answered that under universal bimetallism nations will be able to use whichever metal they want, and to what extent they want; but so far as they do so, and do not use both equally, bimetallism will be inoperative. If they are not to have both metals in use as standard money, they might as well be monometallist at once.

Having mentioned these drawbacks, we need not dwell on others. It is plain that bimetallism, if it does any good, will have many counterbalancing disadvantages, whether it is particular or universal. But the catalogue is far from exhausted. For instance, the difficulty of making such subsidiary arrangements as the exemption of standard money from seignorage, now so conveniently made in a monometallic system, would soon be felt. There would also be an obvious difficulty, under particular bimetallism at least, in finding a means

of bullion remittance as compared with the present system. In remitting now to a country where gold is used, any one at need can draw a cheque on his bankers and get the gold he wants. Under bimetallism he might be offered silver, and consequently have to purchase gold in the market. Under universal bimetallism the difficulty would be the same. Gold and silver *ex hypothesi* would be equally available in paying debts, but money is not wanted exclusively to pay debts with; a particular sort of money is wanted for special purposes, and all choice of this sort would be at an end. In effect, also, the use of either silver and gold in prescribed quantities in paying debts, though it avoids in appearance the fixing of a legal ratio, does fix a ratio in reality. It alters the demand for gold and silver from what it would be if communities merely selected the money they wanted according to their convenience, and *pro tanto* diverts and hinders the natural development of the industry of working the precious metals. It is not to be assumed certainly that this interference with natural taste will be more successful with gold and silver than it has been with other commodities. But passing over all this catalogue of objections, let me only urge that, as a practical measure, proposed to a country like England, bimetallism will be objectionable, because it is an alteration of a system rooted in our habits, to which we have become accustomed as the air we breathe, and which we have acquired with much cost and effort after long experience of many bad systems. Even if the other advantages of bimetallism very much out-

weighed those of the opposite system—and the exact contrary is the case—would not the mere trouble of alteration be an overwhelming disadvantage? The old authorities on English currency might be invoked to bring even stronger arguments. The emphatic protests of Locke and others against *any* alteration of a standard once chosen, as necessarily involving injustice and a violation of contracts, are not to be forgotten, though it is not necessary to our argument here to dwell upon them.

Finally, it remains to be urged that bimetallism, admitting the balance of advantages to be in its favour, and that all other objections are got over, is not practicable in any proper sense of the word. Of course theoretically any particular Government adopting bimetallism, and willing to force its subjects to endure the nuisance and misery of incessant changes in their money, which always occur when bimetallism is really operative, may introduce a bimetallic law. But to have such a law is not to have the two metals actually in use, which is the object aimed at, or to obtain for a country most of the other alleged advantages of bimetallism. The advantages it procures will be for others, and sooner or later, therefore, any single country trying bimetallism will abandon it, as France has so lately done. Nations are not philanthropic to the extent of sacrificing themselves for the good of others. A group of nations trying bimetallism will experience the same results and follow the same course. The only chance for bimetallists, then, is the possibility of their scheme

of universal bimetallism being tried. But can any one dream of such a consummation? Who is to draw the treaty? What power of persuasion will bring all countries and Governments to accept this gospel? The initiative must clearly come from the great Governments, those of England, France, Germany, Austria, Russia, and the United States. But only a dreamer could imagine such Governments agreeing on the principle, on the ratio to be fixed, and on all the subsidiary arrangements necessary; and then uniting to persuade their smaller neighbours, the dissent of almost any of whom would be fatal. So strong has this objection seemed that, for no other reason, Mr. Bagehot and other monometallists have steadily declined to discuss bimetallism. The reluctance is surely not to be wondered at. Even if there were no other difficulty in the way of universal agreement, there is one which would probably be fatal—the risk of particular countries over-issuing paper. The Latin Convention has been a practical failure as regards Italy for this reason, so that universal bimetallism to be really effective must regulate paper as well as coin issues. If it does not, the world will be no more bimetallic than it is now.

What may be urged more strongly, however, on the score of the impracticability of universal bimetallism, is the probability that great mercantile communities may have a mind of their own in the matter, and may not accept bimetallic money. It is amazing to see how the discussion is carried on, as if a Government had only to issue its fiat, and bimetallism would come into use.

Enough facts have been stated in this paper to show that mercantile communities themselves exercise choice in this matter, as England did after 1696; and that bimetallic legislation would not necessarily be followed by corresponding practice. Have bimetallists then any reason to believe that England, which freely chose gold in place of silver in 1696, would now reverse its choice, now when it is so much richer and so much more a centre of international payments than it was two centuries ago? Have they reason to believe that the Californians who rejected greenbacks would submit to take any money the Legislature chose to give them; or that the New York banks would reconsider their late decision not to accept any of the silver coins which Government had just issued as full legal tender?* These and other questions must be answered in the affirmative, and with conclusive facts in support of them, before bimetallism can be talked of as a practical scheme. And no one who knows the business world of London will fancy that, as regards this country, the question would be answered in the affirmative. Leading exchange brokers and bullion dealers have bimetallist leanings; they would like if bimetallism could be introduced into any country. But so far as I can judge of City feeling in general, the attempt to force bimetallism on the mercantile and banking

* Since the American Act of 1890 for increased purchases of silver (see *postea*, p. 163), bankers in New York, when lending money for long terms, have usually stipulated for repayment in gold.

world of this country would produce an instant revolt. The slightest approach to "actuality" which bimetallic theories may attain, would soon bring out the real strength of the feeling or prejudice in favour of the present system which exists throughout the City.

The case against bimetallism thus appears to my mind overwhelmingly strong, and the dislike manifested towards it seems accounted for. Its boasted superiority over the single standard consists in the promise of abundant money, which it does not and cannot fulfil, and which its advocates give in a way that taints their entire argument with unsoundness; in the promise of greater steadiness in the exchanges which it will only keep in certain circumstances, while it does not really matter whether the promise is kept or not, as the exchanges in any event will usually be fairly steady; and in the promise of greater stability in the standard of value from period to period, which it may fulfil in certain circumstances, but where, again, the alleged advantage seems really immaterial. On the other hand, whether particular or universal, the system will be attended with no small inconveniences, such as incessant change of the money in use, and interference with the natural taste of communities in the choice of their money, which have formerly caused great outcries; and in England it would have the undoubted evil of altering a long-established and excellent system, which is based on experience and has answered in every particular the ends of its designers. Bimetallism, moreover, is really

impracticable. If one or two or even more nations try it, they do not succeed in getting the two metals in use, and it is not even conceivable that all should agree to try it. Moreover, whatever Governments may say, it does not follow that great mercantile communities will be obedient, and the chance of their preferring monometallism is an element of difficulty to be reckoned with. Such a scheme does not seem entitled to any favour. As founded on the assertion of vague and indefinite evils, which cannot exist in a community possessing a sound metallic currency, as promising vague and indefinite advantages, and as utterly and hopelessly impracticable, even if it should be tried, it seems really liable to all the dislike which sober business men entertain towards flighty currency projects. Matters in its favour are not mended by the talk, which I have not thought it worth while to discuss, about the ratio of $15\frac{1}{2}$ to 1 being the result of providential arrangement. If bimetallists are sometimes reviled as lunatics, and economists like Mr. Bagehot can hardly be brought to overcome their disgust at the argument for bimetallism, so as to turn aside even to discuss it, they are surely not without excuse. Mathematicians do not stop to argue with squarers of the circle, or with reasoners that the earth is flat.

One more remark by way of supplement. A former controversy on this subject arose out of the suggestions for an international money, which were so common ten or fifteen years ago. Those who attach great importance

to the world having such a money, will regret that the case against bimetallism is so strong, as it is only in such a scheme they can at present see a way to their end. To attempt to reach it by means of the opposite system implies an extensive demonetisation of one metal or the other, which is not to be thought of at present. But the idea of an international money, in the present stage of the world's economic progress, is really premature. Nations generally are not yet so closely interconnected as to make it worth while that all should have the same money, to which there are many other obstacles—such as over-issues of inconvertible paper—as well as the differences between gold and silver. We may well leave future generations, therefore, to deal with this question, content to do the best we can with the monetary arrangements in our power. As the need for international money increases, the means for introducing it may also be prepared, as they would be prepared, for instance, by the gradual introduction in all countries of the use of gold for large payments, the general use of silver in token coinage only, the increasing wealth of the world causing a great increase of the demand for token coinage, and the extension of economising expedients, so as to lighten the strain upon the dearer and standard metal. An international money upon a monometallic basis is thus a possibility of the future, and there is no need for precipitating matters by impracticable schemes.—[1879.]

II.

ON SOME BIMETALLIC FALLACIES.*

In coming before you this evening, it is not my intention to reopen the whole controversy between monometallists and bimetallists. Having expressed my opinions upon the whole case very fully, a good many years ago, in an essay which I contributed to the *Fortnightly Review*, and which is reprinted in the first series of my 'Essays in Finance,' I have no excuse for venturing into the whole of the controversy again. It seems to me, however, that there are one or two points upon which a great deal of the discussion turns, and that apart from what monometallists or bimetallists may think to be the practical issue of the whole dispute, it is most desirable, on theoretical and practical grounds, that the points I refer to should be fully thrashed out.

These points are three in number. The first is that before, in my opinion, we can engage in the practical discussion as to whether monometallism or the only opponent of monometallism now in the field—what is called "International Bimetallism"—is most advan-

* Read before the Institute of Bankers, Wednesday, May 19, 1886.

tageous for the world, the preliminary question has to be discussed, whether it comes properly within the functions of a Government at all to settle such questions as are intended to be settled by international bimetallism. The objects which a Government ought to have in view in dealing with the coinage are in fact a fit subject for discussion by themselves; and I doubt, for my own part, whether they have been sufficiently discussed, or even considered, by many writers upon the "battle of the standards."

The second point I propose to consider is whether in fact the steadiness of the ratio between gold and silver for a long period before 1872, was in fact always due, as is constantly assumed, to the action of the bimetallic ratio established in France. As regards a certain portion of the period, there is no question. After 1850, it is universally admitted that France, possessing in fact silver money which became undervalued, had great influence in arresting the fall in the value of gold consequent on the Australian and Californian gold discoveries, because the new gold went to France to be exchanged for silver. But for at least thirty years before 1850 I maintain—that is, between 1820 and 1850, or rather, to be more exact, from 1820 down to and inclusive of 1847—the circumstances were different, and the ratio established in France had, in fact, no effect. France was a silver-using country in fact; silver was frequently, if not almost constantly, over-valued in the ratio; and if the tendency had been for silver to fall farther, the ratio in France could have had no influence

to arrest the fall. The point is not a very material one, because no one denies that circumstances may be such as to make a bimetallic ratio in a single country operative for a long period. Still, so much stress is laid upon the assumption that the ratio did everything, not only after 1850, but between 1820 and 1850, that I have thought it most desirable to examine and set out the facts. The point may also become important because stress has been laid upon it in bimetallic arguments. If it can be shown that so far from the ratio having kept silver and gold steady towards each other from 1820 to 1850, these metals remained steady mostly without that aid, then the result of the argument is rather in favour of monometallism than in favour of bimetallism. It is a proof of the possibility in certain circumstances, without any country being bimetallic at all, for the ratio between gold and silver to remain comparatively steady for many years.

The third point I propose to discuss is the relation of the proposal of international bimetallism, which is suggested as an improvement upon our present system of standard money, to the difficulty of the general fall of prices. Two advantages are proposed by universal bimetallism. One is the steadiness of exchange between different countries, which I do not propose to discuss at present, as I have expressed my opinions very fully upon it in the essay to which I have already referred. The other is that if international bimetallism can be adopted, the change in the standard from period to period will be less than it will probably be if one set of

countries have gold and another set of countries have silver. What I wish to discuss with reference to this last point is, whether the differences between what monometallism only will do, and what international bimetallism is expected to do, can be set out so certainly beforehand, that they are much worth considering: whether, in fact, any one can know enough of the subject to predict the future; and, next, whether, in view of the circumstances assumed, the difference between what monometallism will do and what international bimetallism, it is assumed, will do, will really be such as to make a great change in the standard worth while, in order to secure what are supposed to be the advantages of international bimetallism.

These are the three points to which I intend to direct your attention. They go to the root of a good deal of the discussion upon the bimetallic question, though they do not cover the whole ground; and although some friends here may be tempted to reopen the whole question, I hope it will be admitted that I have not selected these special topics for discussion in any way unfairly, but merely because they raise points of controversy which are deserving of the most thorough examination.

The Functions of Government in Respect of Standard Money.

The first point I have to discuss, according to this programme, is the functions of Government with respect to standard money. What is it, primarily, that a

Government ought to attempt? And what can it properly effect in this matter?

Now, on this head, to begin with, I wish to call attention to the fact that the interference of Government in the matter of standard money at all is by no means universally admitted to be a proper thing. One very eminent philosopher, Mr. Herbert Spencer, has maintained the exact contrary. He holds that while one of the main functions of Governments is to enforce contracts between man and man, yet it is also of the highest expediency that Government should permit the utmost freedom in the making of the contracts themselves; and that this freedom is interfered with when the Government takes it upon itself to meddle with the coinage. The passage in question is to be found in Mr. Herbert Spencer's 'Social Statics,' pages 437–40,* and without going into his reasons I should like to commend this passage to many of you. It is always useful to have preconceived opinions questioned and the grounds for them examined; and Mr. Herbert Spencer has at least stated enough to show that the assumption of its being the State's proper business to meddle with coinage must not be made too readily.

Of course it would follow that if it is not the State's business to meddle with coinage at all, but to leave that subject alone and let people coin and use as money anything they please, then there would be no occasion to discuss such a problem as international bimetallism. The whole question being left to the free action of in-

* Edition 1868, Chap. XXIX.

dividuals and communities, without the State interfering in any way whatever, then international bimetallism would come about, if it came about at all, by the voluntary agreement of all peoples concerned, and if it did not come about it would equally be by the voluntary acceptance of different money by the peoples concerned. There would be nothing whatever to discuss practically, such as this question of international bimetallism, to be enforced by Governments. All that scientific people would be able to do would be to record the facts of choice amongst the nations of the world, and the consequences, without any suggestion of Government interference in the matter.

It may be admitted, however, that, on various grounds, the practical discussion of a subject like this should proceed upon the assumption that the State may properly interfere, for some purposes, at least, in matters of coinage. But for what purposes? The State may be able to discharge some of the functions which are popularly assigned to it with reference to coinage, and discharge such functions practically with satisfaction, and yet it does not follow that the State should, as a matter of course, discharge certain other functions which it would have to assume, I believe, if it were to deal with such a problem at all as that of international bimetallism. Why it meddles with coinage, and for what purposes, should be distinctly understood beforehand. Now, the primary object of a metallic currency, it is universally admitted, is merely to secure a common medium of exchange within a particular community;

to save communities from the necessity of barter by instituting a common article for which everything can be bought or sold. The articles selected for this purpose have come to be principally metals, and of these principally gold and silver, what are called the precious metals; durability, value for other purposes than money, facility for being stamped so as to show quality and weight of contents, and various other advantages making the precious metals very convenient for this purpose. Clearly, however, communities can enjoy the benefits to be derived from the use of a common medium of exchange without the Governments doing anything more than stamping the bits of metal so as to give the requisite guarantee as to weight and quality. A Government might be able to perform this easy function and yet be in no way qualified to perform much more difficult functions which it is expected on the bimetallic assumption that it should perform.

I think, too, there are not a few matters of detail with respect to the composition of a metallic currency upon which Governments may be well-informed and where they can act usefully. There is no doubt that the establishment of such a metallic currency as that which the United Kingdom possesses is one of which the whole principles and details are fairly well settled, so that a Government can carry them out. If there were only one metal in the world, gold, capable of being used as standard money, while silver and one or two others were available for divisional money, then the present monometallic system which we possess in this country

would be generally admitted, I think, even by bimetallists themselves, to be as nearly perfect as such a metallic money can be. As far as the security of contracts is concerned, no one could ever have the slightest doubt as to what money he would be paid in when the contract came to be fulfilled.

So far, however, all that a Government does by establishing a metallic currency of the kind described is merely to stamp bits of the standard metal so as to guarantee their weight and quality, and next to stamp pieces of divisional money so as to make them available for circulation alongside the standard money, but not to pass current as the standard money itself passes. With regard to the standard money itself, Governments, in order to secure all the advantages of using a metal as money, require to do nothing else than put such a stamp upon the metal as to ensure the practical acceptance of the weight and quality.

Governments, however, have assumed another function in the matter. Besides stamping bits of metal in such a way as to give a guarantee of weight and quality, they have passed enactments for what is known as the "declaration of legal tender." They do not leave the coins altogether to circulate upon their own merits, as it were: they say that contracts made in money are to be fulfilled in "legal money," and a Government for itself declares that its own taxes are to be received and its own expenditures made in the same money. Within proper limits, also, Governments may usefully make such a declaration, and, from the necessity of the case,

Governments are bound to say in what way their own accounts are to be kept. They, and no other, can declare in what form taxes are to be paid, and in what form payments by the State are to be made. As a convenience for legal interpretation, also, it is obviously proper enough that a Government should say what a contract made in money means. It is a provision to avoid disputes and litigation. But, beyond this, I am not aware that Governments do any good, or very much good, by a declaration of legal tender. Restrictions upon contracts which are sometimes introduced must be mischievous, and, at any rate, are very different things from the mere declaration of legal tender. So far as I can ascertain, the declaration of legal tender has come into fashion on account of the misconduct of Governments. They have misused their functions and made coins which were bad, and endeavoured to force them into use by declaring that they are to pass current as if they were good coins; or they have issued inconvertible paper and have tried to force the inconvertible paper into use by the same method. If Governments had been dealing only with good coins, there never would have been occasion for a declaration of legal tender going beyond the limits I have stated in order to get the coins themselves used. Even without a declaration of legal tender, metallic currency, if a good one, would circulate and be useful much to the same extent as it does now.

So far, then, it will be seen there is no question of a Government undertaking any such functions, or con-

sidering any of those matters which it must undertake to consider, if it is to introduce bimetallism for itself, or if it is to be a party to an agreement for international bimetallism. Its functions up to this point, though most useful and most indispensable to mercantile communities, if private individuals have not undertaken them as they might do in Herbert Spencer's ideal state, are of the simplest kind: even a very stupid Government can properly perform them.

It is contended, however, or rather it is constantly assumed by many economic writers, as well as bimetallists, that Governments have other functions to discharge in matters of coinage, that they are to keep a stable standard from period to period, and for this reason among others, bimetallists contend, they should endeavour to keep gold and silver both in use as standard money by means, some say of a fixed ratio, others of a changing ratio. And so there has been endless controversy as to whether a Government can make a ratio, what is really to be gained by its doing so, whether exchanges and prices will not be more stable with two metals than one, and so on. All this may be right enough, but what I am now pointing out is that the function of a Government in dealing with such problems is entirely different from what it assumes in order to ensure the primary objects of a common medium of exchange, which it secures sufficiently by stamping pieces of metal, and leaving people free to make their own contracts. The question I raise is, how far Governments are adapted to perform these

functions at all. It does not follow that because Governments for some purposes can act in regard to coinage properly, and with satisfaction to their constituents, therefore it is to be assumed, as a matter of course, that they are equal to the business of settling such a matter as the ratio between two metals, or keeping the standard stable in any way from period to period, and the like formidable problems.

I might leave the question at this point, merely showing that there is a problem as to the functions of Government involved—that the transition from an automatic coinage, such as we have in this country, to a managed currency, such as is involved in bimetallism, is enormous. But I may state briefly why I consider a managed currency to be an unsuitable business for a State to undertake.

First, the management of a coinage with the distinct view of artificially keeping a standard stable from period to period, either by two standard metals stable with reference to each other, or in any other way, is a departure from the Free Trade principle which Governments ought to follow in all commercial matters. Bimetallism —the declaration that one metal is to pass current as so much of the other—is, in fact, Protection. Theoretically, Mr. Wolowski's argument that a Government may pass a legal-tender law declaring that contracts made in money are to be fulfilled by the payment of so much in either one metal or the other, is no doubt verbally sound. A Government might, indeed, pass a legal-tender law declaring that contracts made in

money are to be fulfilled not only in equivalent quantities of two, but in equivalent quantities of many metals, and even other articles which are not metals. All that a Government does by a legal-tender declaration of this kind is to interpret,—to say what a certain contract means. The complement of the law, however, upon any Free Trade principle, would be that the subjects of the Government should be at liberty to make their contracts either in one or two metals, or in any other form they pleased. As it is, in this country, notwithstanding our legal-tender law, there is nothing to prevent any man making a contract to have so much weight and quality of silver delivered to him or so many silver coins: in fact, there is really no difficulty as far as the free action of people in this country is concerned in people being bimetallic if they will. What would be an interference with freedom, however, would be for a Government to say that contracts made in money were to be fulfilled in either gold or silver at a certain ratio, and that no other contracts in money were to be practically permitted. As I understand the argument, there would be no value in bimetallism for a particular country, or in what is known as international bimetallism, if there were not to be some restriction upon the liberty of the subject in the way described.

Second, as with other Protective measures, the questions with which a Government would have to deal the moment it begins to be Protectionist are complicated and embarrassing to a degree. As regards this

particular question what Governments would have to consider is, according to the assumptions of bimetallists themselves, whether, in point of fact, the probabilities are that the standard of value will be more stable with gold and silver both in use, or both legally usable, than with one only; whether, in certain national emergencies, which are by no means impossible still, it would not be a serious drawback to such an arrangement that a country might find itself without one or other of the metals which it would require or find very convenient, particularly in the case of war, where the absence of a large sum in gold might be a very serious obstacle to success; whether it would be possible, indeed, to introduce such a system without the creation of some agency for watching its progress and effects, so that at any moment the State might be able to turn round and make the requisite changes in the system; and, last of all, in the case of an international agreement, what stipulations would have to be made so as to secure liberty of action in certain emergencies, and whether the agreement securing such liberty of action to all the parties to it would really be worth anything. It would be necessary also for Governments, of course, in dealing with the question, to consider very carefully what the advantages are, or the alleged advantages, of bimetallism or international bimetallism, such as the amount of good done by stability of exchange between different countries, and the amount of good to be done or attempted by preventing changes in the standard from period to period, by studying, in fact, the vexed

problems of changes in prices which have occupied the attention of the mercantile community in the last few years, and coming to a practical conclusion regarding them.

Now it seems to me to go almost without saying—and I have studied what Governments can and cannot do a good deal—that Governments are not so fit by the nature of their constitution, to deal with problems like these, as they are to deal with the institution of a merely automatic coinage on the monometallic principle. They can only act at all in difficult and special technical matters when expert opinion is unanimous, and here it is not unanimous; and even if it would be possible for the wisest economists and statisticians to agree among themselves as to what is likely to happen in the future with regard to gold and silver, first, upon the basis of letting them alone, and next upon the basis of international bimetallism, and as to what action in view of the probabilities Government should take, I should doubt whether it would still be possible to secure the proper action of Governments in the matter. To obtain the action of Governments you have to submit the discussion to tribunals of a very peculiar description; to Parliaments which are full of people who have no intellectual interest in the subjects and no qualification of any sort or kind for dealing with them, and to constituencies electing the members of Parliament who are still more unfit, and who can have little conception of the nature of the problems to be discussed, and no means whatsoever of forming practical conclusions upon

them; who are, in fact, likely to be bewildered and confused if a Government makes a change of any kind in respect of the standard money.

The conclusion I would come to, then, is that before discussing so fully, as many economists and statisticians do, the *pros* and *cons.* of monometallism and bimetallism, they should discuss first of all the practical question whether the subject is one to which a Government, especially a Democratic Government, like that which we now have in this country, can have anything properly to say. The fitness of Governments in the matter is as much a part of the problem as anything else. The reasons for a Government going beyond the establishment of an automatic coinage should be of the strongest possible kind, and the method in which the Governments can act and the instruments they can use should not only be clear to experts, but should be capable of popular explanation. The danger that interfering Governments may lose for their subjects the advantage of an automatic coinage itself should compel the utmost caution in assuming those functions which it must assume if bimetallism in any form is to be possible.

The Ratio between Gold and Silver, 1820–50.

The second point I propose to discuss is, whether, in point of fact, the steadiness of the ratio between silver and gold, for many years before 1872, was due through-

out to the existence of the bimetallic ratio of 15½ to 1 in France.

I need not repeat the statements I have already made as to the position of the argument in the discussion, owing to the stress which bimetallists have laid upon it, and the confirmation which the facts furnish, in my view, of the opinion that gold and silver do not need an artificial ratio between them in order to keep fairly steady for many purposes, though not for all purposes of exchange. By way of a preliminary, however, I should like to point out that even if it could be shown to be probable that the maintenance in fact of the ratio of about 15½ to 1 for the whole period alleged, was due to the circumstance that that particular ratio had been legally established in France, certain circumstances favouring the operation, yet in point of fact the long experience of mankind against the attempt to establish such ratios would not thereby be overthrown. The fact that for centuries before 1800, various Governments of Europe attempted to maintain different ratios between gold and silver, and that in spite of all their efforts, the value of silver relatively to gold, for many centuries steadily declined, so that the value from being higher than 10 to 1 in the first millennium of the Christian era, fell by successive steps during the second millennium, till it was only 15 or 16 to 1 at the beginning of the present century, and is now about 20 to 1 only, would still be true. That during this long period the ratio of 15½ to 1 existed for about half a century, would not appear to me sufficient evidence, historically,

to prove that the ratio of 15½ to 1, or any other ratio, could be maintained for an indefinite period.

The present question is simply, however, whether, in point of fact, the existence of the ratio during all the period claimed for it before 1872 was due throughout to the legislation of France, or whether it would not have existed apart altogether from the establishment of a bimetallic ratio in that country. Replying to this question, I must lay stress on the admission already made as to the effectiveness of the ratio for a considerable portion of the period. From 1850 to 1872, it may be admitted, the ratio had a great effect in maintaining the relative value of silver and gold.* At the beginning of that period France was in possession of an immense stock of silver coin. It is, in fact, my contention that, although possessing a bimetallic ratio between 1820 and 1847, France had, in fact, become a silver-using country. The consequence was that in 1848–50, when the new gold began to come forward from California and Australia, and to come forward at a cheaper price than the ratio which had been established, so that, to use the technical expression, gold was over-valued in that ratio and silver under-valued, much of the gold that came forward was sent into France to be exchanged there for the under-valued silver. In this way there is no doubt the ratio acted, after 1850, as a parachute to prevent the fall in the value of gold which might otherwise have occurred. Silver went away from France and gold took its place, and this

* See *postea*, p. 126.

immense new use of gold, which was conveniently provided by the bimetallic ratio, arrested the fall in its value. I do not know that the ultimate effect would have been very different if France had had no bimetallic ratio, but had been in 1850, as Germany was, a purely silver country. But in point of fact, and as a matter of history, that fall in the value of gold from 1850 down to 1870, which might have been possible if no such outlet had been provided for it as was provided in France, was arrested by the existence of the bimetallic ratio in that country. As a matter of history, however, and to this aspect of the circumstances I draw particular attention, the ratio in France operated because France had a stock of the under-valued metal —silver—and the over-valued metal was poured in to take its place. A ratio, I admit, will always operate in such circumstances. It does not follow that it will operate when the bimetallic country is already saturated with the over-valued metal. In the latter circumstances, there can be no exchange of one metal for the other, and, consequently, no operation.

The main fact that I have now to urge, then, is that, although the bimetallic ratio was effective in France in the way described from about 1850 down to 1872, yet the circumstances before that were such that the official declaration of a ratio in France had no effect whatever in maintaining that ratio practically. The reason is that from about 1820—and I mean to deal specially with the period from 1820 to 1847—France had become, in point of fact, a silver-using country.

The effect of the bimetallic ratio up to that time had been that silver had become the practical money of France, and what gold there was in France was not in any way performing the functions of standard money, but was used for special purposes, and was always at a premium. In circumstances like these, I maintain that it was impossible for France, by means of its ratio, to arrest, in any way, a fall in silver if silver had become more abundant, relatively, to gold. If, at that time, the relation between gold and commodities and between silver and commodities had been what it is now, and the value of gold had tended to appreciate still more, and the value of silver to depreciate—and there was some tendency in that direction—then it was quite impossible for the ratio in France to act in any way as a parachute to the fall in silver. There was no gold to be exchanged for the falling metal. Consequently, however much silver had tended to fall at that time, there was nothing in France to arrest the fall. The fall in gold, as we have seen, after 1850 was arrested by the fact that there was a large amount of silver to be exchanged for the falling gold; but before 1850, the tendency being rather for silver to fall, there was no amount of gold in France to be exchanged for the falling silver, and so to arrest the fall in the latter metal. In other words, then, if in point of fact the ratio between silver and gold of $15\frac{1}{2}$ to 1 or thereabouts was maintained between 1820 and 1850, the maintenance was in no way due to the bimetallic ratio in France: it was simply due to the fact that for that long period

the demand for gold and silver throughout the world was of a kind to keep the two at the ratio described. The moment any tendency was shown for gold to become cheaper than silver, the circumstances were such that the ratio could become effective, and when that tendency was manifested in 1850, it did become effective; but the tendency before 1848 being rather for silver to become cheaper than gold, the circumstances were such that the ratio could not be effective at all.

This is the general proposition which I have to make, and which seems to me incontrovertible if the facts are as I have stated them. And the facts themselves appear equally incontrovertible. I have put in the Appendix* a long table extracted from some old blue-books, showing, along with the rate of exchange on Paris, which it is not necessary to refer to, what the premium on gold in Paris was at the beginning of each month from 1820 down to the year 1847. From this I have compiled a comparatively short table, which is embodied in the text (see next page).

In other words, during the whole of this period there was constantly a premium upon gold in France, and that premium frequently rose—in fact, in all but a very few years rose—to over 1 per cent., and on more than one occasion was close upon 2 per cent.; actually in 1832 exceeding 2 per cent. I should think it is quite clear from such a state of things that if silver in the year 1832, for instance, or 1833, or 1845, had tended

* See Appendix A.

still more to fall in value, there was nothing in the circumstance of a bimetallic ratio being established in France to arrest the fall. If there had been any gold in France sufficient to arrest the fall, then the premium on gold could not possibly have risen to the figure of 20 per mille, or 2 per cent. The fact that the premium became as high as 2 per cent. was sufficient to show that, if the fall of silver had tended to proceed further, the premium might as well have become 3 or 4 or 5 per cent.: there was nothing in France to arrest the progress of this premium upon gold. It may be said that the decline in the value of silver which we now

SUMMARY OF

TABLE showing the highest and lowest premium on gold at the beginning of each month in Paris from 1820 to 1847.

Premium per mille = 0/00.

Year.	Highest.		Lowest.		Year.	Highest.		Lowest.	
	Fr.	cent.	Fr.	cent.		Fr.	cent.	Fr.	cent.
1820	9	00	3	50	1834	9	00	4	50
1821	13	00	5	00	1835	13	25	4	50
1822	7	50	1	00	1836	16	25	8	25
1823	14	00	3	50	1837	12	00	7	00
1824	8	00	1	00	1838	11	00	7	25
1825	3	50	0	75/100	1839	10	00	7	50
1826	10	00	4	00	1840	10	00	4	00
1827	5	00	1	50	1841	10	00	3	75
1828	8	00	1	75	1842	12	00	6	00
1829	16	25	6	50	1843	14	00	11	00
1830	16	50	4	00	1844	13	50	9	50
1831	12	50	1	75	1845	19	50	11	00
1832	21	00	5	00	1846	17	00	11	50
1833	20	00	11	25	1847	19	00	8	00

witness did not then take place; that there must have been something in the condition of France to arrest this decline, and what could it have been but the ratio? but the argument, *post hoc, ergo propter hoc,* is never a good one. It cannot be assumed that the ratio operates until we understand how it operates. If gold had been going out of France, and silver taking its place, the effectiveness of the ratio in preventing the fall in silver would have been apparent just as its effectiveness afterwards in preventing the fall in gold was apparent. But there was no such exchange between silver and gold.

To illustrate the subject further, I have compiled a short table as to the price of silver between 1833 and 1847 from the well-known circular of Messrs. Pixley & Abell. I am sorry I cannot go farther back at present than 1833, but as the table is only illustrative, the defect is not material. If the state of things for only a portion of the time was what I believe it to have been for the whole time between 1820 and 1847, that would be quite enough for the purpose of the present argument. (For table, see next page.)

From this it will be seen that all through the period I am dealing with, namely, from 1820 to 1850, the price was such that the ratio was not 15½ to 1, but frequently more nearly 16 to 1.

To bring the matter to a further test, I have now to lay before you a table showing the amount of gold and silver coined in France from the year 1821 to 1847

inclusive, in quinquennial periods, except the last two years 1846–47, which I have put by themselves. The figures are compiled from the recent blue-books on the Silver question, where those for each year can be found. (For table, see next page.)

It is thus obvious that the coinage of silver in France, in the period in question, was enormously in excess of the coinage of gold—that, in fact, the latter metal could only have been coined for special purposes, and

STATEMENT showing the annual average price of bar silver per ounce standard in each year from 1833 to 1849 inclusive, with the highest and lowest of the monthly average prices in each year. (Extracted from Appendix to First Report of Royal Commission on Depression of Trade, as compiled from a circular of Messrs. Pixley & Abell.)

Year.	Average Price per Ounce.	Lowest Monthly Average.	Highest Monthly Average.
	d.	*d.*	*d.*
1833	$59\frac{3}{16}$	$58\frac{3}{4}$	$59\frac{7}{8}$
1834	$59\frac{15}{16}$	$59\frac{3}{4}$	$60\frac{3}{8}$
1835	$59\frac{11}{16}$	$59\frac{1}{4}$	60
1836	60	$59\frac{9}{16}$	$60\frac{5}{16}$
1837	$59\frac{9}{16}$	$59\frac{1}{8}$	$60\frac{5}{16}$
1838	$59\frac{1}{2}$	$59\frac{3}{8}$	$60\frac{1}{16}$
1839	$60\frac{3}{8}$	$60\frac{1}{8}$	$60\frac{5}{8}$
1840	$60\frac{3}{8}$	$60\frac{3}{16}$	$60\frac{5}{8}$
1841	$60\frac{1}{16}$	$59\frac{3}{4}$	$60\frac{3}{8}$
1842	$59\frac{7}{16}$	$59\frac{3}{16}$	$59\frac{7}{8}$
1843	$59\frac{3}{16}$	$59\frac{1}{16}$	$59\frac{3}{8}$
1844	$59\frac{1}{2}$	$59\frac{3}{4}$	$59\frac{3}{4}$
1845	$59\frac{1}{4}$	$58\frac{7}{8}$	$59\frac{11}{16}$
1846	$59\frac{5}{16}$	59	$60\frac{1}{8}$
1847	$59\frac{11}{16}$	$59\frac{1}{16}$	$60\frac{3}{8}$
1848	$59\frac{1}{2}$	59	$59\frac{7}{8}$
1849	$59\frac{3}{4}$	$59\frac{7}{16}$	$60\frac{1}{16}$

it was really silver that was in use as the standard money. In other words, during all the period that we are dealing with, France was, in no strict sense of the word, a bimetallic country, but a silver country; and the tendency being for silver to fall, it was no more in a position to arrest the fall of silver than Germany was—at least, those parts of Germany that were silver-using—or India, or any other silver-using country.

I should like to add to this statement a little contemporary evidence to show that, in point of fact, the Europe of that time was considered to be a region possessing silver money only, and that England—with the exception of the period from 1834 to 1850, when

STATEMENT showing the amount of Gold and Silver coined in France, in quinquennial periods, 1821–47 inclusive.

(In thousands of pounds sterling, 000's omitted; francs converted at 25 fr. per £1.)

Periods.	GOLD.		SILVER.		Total.
	Amount.	Proportion to Total.	Amount.	Proportion to Total.	
	£	%	£	%	£
1821–5	2,329	11·7	17,623	88·3	19,961
1826–30	1,470	5·5	25,160	94·5	26,530
1831–5	4,131	11·2	32,881	88·8	37,012
1836–40	2,949	16·2	15,241	83·8	18,190
1841–5	797	5·0	15,166	95·0	15,963
1846	83	4·2	1,915	95·8	1,998
1847	308	9·0	3,131	91·0	3,439
Total ...	12,067	9·8	111,126	90·2	123,193

America also had a practical gold standard—was considered to be the only gold-standard country in the world. Some very interesting evidence was given on this head about the year 1833 by one of the Rothschilds of that time. I quote a passage from his evidence:—

EXTRACT from evidence given by N. M. ROTHSCHILD, Esq., before the Committee on Bank of England Charter, on 24th July, 1832.

"4828. In your experience, for some time past have you found that there have been greater fluctuations in the demand for silver, or in the demand for gold?—The demand is in general alike in both, if the Exchange is against us; but lately there has been more importation of silver than gold.

"4829. Would silver regulate the Exchange precisely as gold?—Certainly; and in France, and on the Continent, rather more.

"4830. You have said that when any of the Continental Powers wish to supply their military chests they always make a demand for gold?—Certainly.

"4831. Does not that produce considerable fluctuation in the value of gold?—Not very much, because gold in general is not so much wanted on the Continent as silver; silver is the regular coinage of those countries.

"4832. Do you think that the value of silver is as little subject to variation as the value of gold?—Silver has no variation because there is a coinage of silver, so that there can be no difference in silver, except at some times when it is wanted by any European Government for particular purposes.

"4833. Has there been a great export of gold from France, at different times, for the purposes of foreign war?—Certainly; in general the gold is bought up in France before it goes from this country, and if there is a scarcity in France then it is fetched from here.

"4834. Does the demand for gold from France produce a scarcity of money in France?—No.

"4835. Why is that?—Because the gold is in general in private hands; it is merchandise there.

"4836. If there was a demand for silver from France would not that produce a scarcity of money in France?—Certainly; because it is the coinage of the country.

"4837. Then, whenever there is a demand upon a country for a metal, which is the standard of value, it will produce a scarcity of money?—Certainly."

The other piece of evidence I wish to refer to is that of a distinguished authority who was in favour of England even then adopting the bimetallic standard—I mean Lord Ashburton. In a paper which he laid before the Board of Trade, and which is so curious in many ways that I intended at first to have it copied and put in the Appendix, he goes at length into the question of the inconvenience to which England at that time was subject, because it had a gold standard and every other country had a silver standard. It is often supposed, I believe, that one of the causes of England's commercial supremacy has been its gold standard. It is consequently very interesting to find that, according to the expert opinion at that time, the gold standard was rather a drawback to our prosperity than otherwise, and that trade was subjected to inconvenience because every other country was silver-using and we alone were gold-using. The point I am at present urging is merely that it was recognised at the time to be the case that every country except England was silver-using. Consequently, the existence of a bimetallic ratio in any one of these silver countries could have had no effect in maintaining the ratio, if, in point of fact, the natural course of things was for silver to continue to fall, with reference to gold, and not to rise:

EXTRACT from evidence given by Alexander Baring, Esq., M.P. (afterwards Lord Ashburton), before the Committee for Coin, at the Board of Trade, Whitehall on the 26th April, 1828. [Parly. Paper, H.C. 31 of 1830.]

"Now it is evident that the bank, wishing to reinforce its supply of specie, can do so with infinitely increased facility, with the power of either drawing in gold or silver, than if it were confined to only one of the metals. The choice is already much, but the circumstance that silver is the practical standard of Europe, more than doubles the certainty and facility of procuring a supply. Bills on Paris, Amsterdam, Hamburg, &c., once taken, secure silver, in which they must be paid; but if gold alone will answer the purpose of the bank, gold is a merchandise which you must go into the market and buy."

* * * *

"The wants of the bank, when they occur, interest speculators and jobbers of every description, and, independently of operations to derive a profit from the price of the gold wanted, there will be persons interested in thwarting the bank, and preventing its supply. A large capitalist might do this with effect, a combination of three or four might do it almost with certainty; and it should be here stated that the Banks of France and of Amsterdam both make advances at a very low rate of interest on the deposit of gold. I believe they advance the value less 10 per cent. By this means an advance of £100,000 would lock up a million, and one million would lock up ten. It will easily be seen what advantage this circumstance affords for the combinations I have mentioned. All this is avoided by adopting the same medium of circulation with the rest of the world. By that alone you can go to the common stock for that occasional aid which no precaution can prevent your sometimes wanting, for it would be uselessly extravagant for any country to hold permanently that supply of the metals which occasional accidents may render necessary. To be safe, you should make yourselves one of the general community of the world for this purpose; any attempt at peculiarity deprives you of the benefit to

be derived in the hour of need from the uniformity of the thing needed, and the consequent facility with which it can be procured. The greatest facility would be attained by being able to use the two metals. That they can be so used, the example of France abundantly proves. But if it be desired that only one should be taken, I should certainly prefer silver for the purpose of conformity with other countries, and thereby opening to ourselves a more certain supply when needed."

That none of the facts may be kept out of sight, I should add in fairness what I have already incidentally mentioned: that for some portion of the period there was a country in existence with a bimetallic ratio which was in a position to arrest to some extent the fall in silver if it had proceeded further. This country was the United States, whose history during the period in question is interesting. Down to 1834 the United States was in even a worse position than France to arrest the fall in silver. The ratio which it had established was 15 to 1, in which it will be observed silver was considerably overvalued. The consequence was that between 1820 and 1834 the United States, although with a bimetallic ratio of 15 to 1, was, in fact, a silver-using country, just as France was with a bimetallic ratio of 15½ to 1, silver in both cases being overvalued, but more overvalued in the United States than in France. In 1834, however, the United States adopted what they thought would be the more satisfactory ratio of 16 to 1, which seemed to correspond better, and did, in fact, I believe, correspond better, with the actual facts of the market than the French ratio of 15½ to 1. The result, however, was that on the whole it was found that gold

was overvalued in this ratio, and the silver of the United States was consequently taken away, and the country became a gold-using country. Consequently, from 1834 to 1850 the United States was in a position to have arrested a further fall in the value of silver if it had taken place. It had a certain amount of gold—about fifteen millions sterling in all, I believe, was coined—which could have been exchanged for silver if silver had tended to fall further; and it may be considered, therefore, that from 1834 to 1850 the United States was in a position to operate in such a way as to prevent a fall in the value of silver below the ratio of 16 to 1. All that can be said is that the ratio being steadily below 15½ to 1, and France being a silver-using country, France could have had no effect in preventing a further fall in silver, while the fact that the United States with the ratio of 16 to 1 was able to become a gold-using country shows that the circumstances were not then such as to lead to a further fall of silver. Before a fall below the ratio of 16 to 1 could have taken place, the United States would have had to lose the gold it had acquired, which it never did. Still, between 1820 and 1847 the maintenance of the ratio of 15½ to 1 was not in any way due to the legal declaration of that ratio in France, which was only calculated to operate in one set of circumstances, such as did not, in fact, exist in the period in question.

Such are the undoubted facts of this period; and what I have to urge is that, instead of being an argument for bimetallism, they are really an argument

for the opposite system. If for such a long period the ratio between gold and silver remained comparatively steady, although the so-called bimetallic countries with the ratio $15\frac{1}{2}$ to 1 were practically silver countries, then it is surely possible for silver and gold to remain comparatively steady, although every country is monometallic, some with a silver standard, others with a gold standard. The experience is, in fact, a confirmation of the theory that as silver and gold must each from the nature of the case, when used as standard money, be comparatively stable with reference to all other commodities, therefore they must be comparatively stable with reference to each other. We have seen, in fact, that for a period of more than a quarter of a century silver and gold were actually stable in this manner, and there was no ratio operative to tie them together. More recently there has been, I think, experience of a similar kind. Between the years 1878 and 1884, inclusive, gold and silver were, in fact, comparatively stable with reference to each other, the range of variation being a maximum of $54\frac{1}{2}d.$ and the minimum of $49\frac{3}{4}d.$, and the range of variation in the last five years of the period being $52\frac{3}{4}d.$ and $49\frac{3}{4}d.$ only, while the range in any single year was still less. And this steadiness existed, although since 1872, as everyone understands, there has been no ratio to tie the two metals together. Since 1884 there has been a new fall in silver, and consequently a change in the ratio; but such changes, I maintain, from the very nature of the case, even without a bimetallic ratio, are only likely to be oc-

casional. The recent fall is, no doubt, partly due to the expectation of legislative change in the United States. As a rule, for the broad reasons stated, gold and silver being comparatively stable in price with reference to each other, although fluctuations of some sort are not preventible, and a slow change from period to period in the ratio with reference to each other is equally not preventible, if we leave things to natural causes, yet we may have the utmost confidence that if we leave things to such causes, gold and silver will remain steady with reference to each other for comparatively long periods.

The important matter is that legislatures should leave things as much as possible alone. Let each country select the standard money which suits it best and adhere to that standard, is the best rule which can be laid down in matters of currency. The embarrassments of the last ten or fifteen years have arisen, not simply from certain countries ceasing to be bimetallic, but from certain countries making great changes in their money. The same mischiefs would have occurred supposing all countries to have been monometallic, some with silver and some with gold, if great countries like Germany and the United States had suddenly changed from one metal to the other, or had suddenly given up paper money and returned to specie payments, or if a country which was monometallic had suddenly changed its mind and become bimetallic, which is the change to some extent the United States has made or threatens to make. It is the fact of change which is the mischief,

and not because the change is from bimetallism to monometallism or the reverse.

Bimetallism and the Fall in Prices.

The last point which I have proposed to examine is whether bimetallism is in fact calculated to be a remedy for the evils which are alleged to result from such a fall of prices as has taken place during the last fifteen years: whether, if practicable, it is calculated to make so much difference in the results as to justify an extension of the functions of Government to introduce it.

It may be admitted that in the actual circumstances of the world, if France had continued to be bimetallic, probably some of the mischiefs of the recent fall in prices would not have been experienced. If France had been bimetallic there is no doubt that before this time it would have become practically a silver-using country. Silver being overvalued in the legal ratio in France, would have flowed to France to be exchanged for gold, and consequently the fall in silver would have been, *pro tanto*, arrested, and gold would have been more abundant in other gold-using countries than it has been. In fact, the circumstances would have been such that the existence of a bimetallic ratio would have caused that country to counterbalance the effect of the substitution in Germany, and partly in the United States, of gold money for silver and paper. But to go into all such matters would be to rake up past history

without profit. Equally the alleged mischiefs would have been prevented if Germany and the United States had not made the change they have done. There is no profit in such hypothetical discussions. What has to be considered is whether, in the present circumstances, with France, Germany and the United States, as well as ourselves—that is, the chief commercial countries of the world—all practically gold-using, there is anything to be gained with reference to the future course of prices by the adoption of bimetallism.

On this head there are two points to be considered—(1) The immediate effect of universally introducing the ratio of $15\frac{1}{2}$ to 1; and (2) The subsequent course of prices.

As to the first, I should not be too confident, because there is much uncertainty as to what would happen. The probabilities seem to be that, suppose in any way, whether by means of bimetallism or otherwise, silver could be brought more into use as standard money than it is, so as really to bring up the ratio again to $15\frac{1}{2}$ to 1, a rise in gold prices would take place, and at the same time there would be a fall in silver prices—that is to say, a rise in the value of silver. The fall in general prices in the last fifteen years being assumed to be about 20 per cent. in gold while it is hardly appreciable in silver, and gold and silver being about equal in amounts, the effect of the restoration of the ratio would apparently be that gold prices would rise 10 per cent. and silver prices fall 10 per cent., so that matters would be equalised on the basis of a ratio of

15½ to 1. In Mr. Barbour's very interesting book* there is a table at page 92 showing what the index number of the "Economist" would have been lately in silver as well as in gold, from which it is obvious, I think, that if the ratio of 15½ to 1 had been maintained, then the actual change of the index number, instead of showing a fall of about 20 per cent. in gold and hardly any in silver, would have been intermediate between the two—that is, a fall of 10 per cent. in gold and a fall of 10 per cent. in silver only. So that, to adjust matters now, silver prices would have to fall and gold prices would have to rise. This would be the immediate effect.

And the question now to be considered is, Is it an effect worth trying for? Is it not rather, unless there is some great object behind, a new disturbance that should be avoided? I should be inclined to say for answer that whatever virtue the ratio of 15½ to 1 may once have had, it ought not to be restored again at so much expense. There is no motive that I can see for disturbing all prices once more in the way described.

The question of the subsequent course of prices, supposing gold and silver to be tied together at any ratio that may be thought practicable, is more interesting. Is there much to be gained? Will a fall of prices such as has happened be prevented? Will a future fall of prices such as is still apprehended in gold countries be prevented at all, or prevented to such a

* 'The Theory of Bimetallism.' By D. Barbour. London: Cassell & Co.

material extent as to make the institution of a bimetallic ratio desirable ?

Answering these questions, it seems to be obvious from what has been already stated that bimetallism, or even a more extended use of silver in any form, would only have prevented partially the evil of falling prices which has attracted so much attention of late years. Even supposing gold and silver to have been used generally in the ratio of 15½ to 1, prices would still have fallen 10 per cent. as against a fall of 20 per cent. in gold prices which has undoubtedly occurred. The catastrophic changes in the use of gold and silver, of which so much has been said, have thus only aggravated an evil which must have existed independently. Even if there had been no such catastrophic changes, gold prices would still have fallen 10 per cent. To prevent the fall being 20 instead of 10 per cent. in another ten or fifteen years, catastrophic changes should still be avoided; but the question is, Will the restoration of 15½ to 1, or other expedient, once the immediate effect is over, prevent a fall of 10 per cent. in a similar period ? Here it seems to me the answer can only be in the negative.

Nothing that can be done by any arrangement of the ratio between the two metals will, in the nature of things, have any effect whatever in arresting a further fall of prices. What has happened in the past will happen again. Even with bimetallism there would have been a 10 per cent. fall in prices in the last few years. Similar falls must be expected from period to period.

The point is so important that a fuller statement of the reasons may be given. A fall of prices from period to period is substantially due, as I have more than once pointed out in former years, to the necessary difficulty of increasing the stock of precious metals so as to keep pace with the multiplication of commodities and the multiplication of the numbers of the people. The tendency, as a rule, amongst communities advancing so rapidly in numbers and in wealth as European communities do, including amongst them people of European descent, like the United States and Australia, must be for prices to fall steadily from period to period. Exceptions only occur when you have such tremendous changes as those caused by the Australian and Californian gold discoveries, or, as I believe, by changes like what took place at the end of the last century, when there was a great expansion of the note circulation of banks in this country, which, no doubt, would have the effect of economising the use of the precious metals and making the same metals go further than they did before. But save and except any great changes of that kind, which are not to be looked for as a rule, the permanent tendency must be for prices to fall, and whether there is one metal in use or whether there are two metals in use can have no effect whatsoever on this permanent tendency. If there are two metals in use, or about equally in use, then there must be an equal supply of the two to keep matters in equilibrium. Say, for instance, that there are 2,000 millions sterling in use altogether, half silver and half gold, and 2 per cent.

per annum of new supply is required to keep things in equilibrium. Clearly the supply in the case supposed would have to be forty millions sterling. Supposing there were only one metal, that either gold or silver were to be completely blotted out as money, and all nominal values were to be halved, then the new supply of the precious metals to keep things in equilibrium would still be 2 per cent. as before—that is to say, twenty millions sterling—and this supply would just be as fitted to keep things in equilibrium as the supply of forty millions sterling for the two metals together. In fact, if you increase the mass, prices will be adjusted to that mass, and the supply will have to be increased proportionately to keep matters in equilibrium.

What I have to urge, then, is that bimetallism is not adapted to be a remedy for the evil of a persistent fall of prices, if it is an evil, and so far as it may be an evil, such as has been going on for the past few years. If there had not been the catastrophic changes which have taken place, it is possible that the fall in gold prices during the last ten or fifteen years would not have been so great as it is; but there would have been a fall of prices of some kind, and in future there must be a similar fall in prices—as far as one can judge—which will in no way be arrested by the use of the two metals together on any ratio that can be established. The significant fact that silver prices have not risen during the last fifteen years in silver-using countries ought not to be lost sight of.

It will be urged, however, that in consequence of

compensatory action, when two metals are used, the difference from period to period is likely to be less with two metals in use, on a plan of international bimetallism, than if one only were to be in use. This is Mr. Barbour's argument, and it is not without interest. Suppose two metals to be equally in use, but not tied by a ratio, and the addition to the one in a given period should be, say, 10 per cent., under which a certain fall of prices takes place in countries where that metal is used, but the addition to the other should be, say, 20 per cent., under which prices in the countries using that metal remained in equilibrium. By tying the two metals together there would be a fall of prices in all countries, but the fall would be less in the countries using the metal to which 10 per cent. only is added, as compared with 20 per cent. added to the other than it would otherwise be. But, admitting all this, what I have to point out is that the important fact in the matter is the fall of prices, and that, as that fall is not preventible, the *measure* of the difference between what is likely to happen under one and what is likely to happen under two metals must be taken before any estimate can be formed as to whether it is worth while remedying that difference, the primary evil itself not being remediable. The practical question at the moment will be, suppose in the next ten years a fall of 10 per cent. in prices is probable from the point at which they would stand when a universal bimetallic ratio is introduced, how much less per cent. will that fall be than the fall in gold prices per cent. from the present point, supposing we leave things alone? If, in

the one case, it is to be 10 per cent., and, in the other, 11 or 12 per cent., is the difference between 10 and 11 or 12 per cent. worth preventing by elaborate devices, the fall of 10 per cent. not being preventible? The practical difficulty of the matter is that the future cannot be foreseen. We do not know what will be the practical limits of the compensatory action. We may even be better off by leaving things alone. But, unless there is some reason to believe that there will not only be compensatory action, but compensatory action of an important kind, such as to substitute a fall of 1 or 2 per cent. only for one of 20 per cent., or something like that, I should myself doubt if compensatory action were much worth trying for in view of the future fall of prices. The great events of the last fifteen years have only caused a fall of 20 per cent. at the outside; even a total cessation of supply would hardly cause another such fall in a similar period, and such a cessation is too improbable to calculate upon. The fall of prices in future, though inevitable, will thus be limited, and the difference to be made by "compensatory action" would be still more limited.

The conclusion, then, is that bimetallism is no remedy for the future fall of prices itself, and that the limits within which it could operate as a partial remedy by equalising the fall in silver and gold prices, are so narrow as not to be worth practical consideration. They are not such as ought to induce a Government to violate the principle of an automatic coinage. Might I suggest too that the mere statement of such a question

helps to confirm my previous argument as to the difficulty Governments would find in practically attempting to face such problems?

I have thus dealt with the three points put forth in my programme; let me only add a few words by way of summing up. What I have been desirous to do is to concentrate attention on certain main points which appear to me to require a great deal of elucidation before the bimetallic controversy can itself be entered upon. I attach especial importance to the first point of all—viz., the question of the functions of Government, because I believe that, in point of fact, Governments are unequal to the solution of problems which are laid before them by those who are in favour of bimetallism. One great danger in coinage matters, I believe, is that Governments may be tempted to include amongst their other functions the management of currencies, whereas the only proper way in which they can give attention to the subject—the only thing they are capable of really doing well, I believe—is to institute an automatic, unchanging currency, which, having once established it, they leave alone, their subjects being left absolutely free to make contracts as they please themselves. Much of the great currency mischiefs for many years past has arisen from the facts that Governments have not left the thing alone. The primary offender in the matter perhaps was Germany, which made a mistake, as I believe, in substituting gold for silver as the standard money of the country. The

mistake was a very natural one to make, and no doubt the circumstances were such in Germany that with the various moneys it possessed and the bad state into which the coinage had got, reform was indispensable. Still, it would have been better if the right principles in the matter had been more thoroughly understood and the change had been confined to the irreducible minimum, viz., the substitution of good coinage for the bad coinages which existed, but without any change whatsoever in the standard metal. A change in the standard is a matter which ought to be very carefully considered indeed. More recently a great deal of evil has been caused by the unfortunate legislation of the United States. No doubt the pressure upon gold would have been more severe than it has been if the United States had not passed the Bland Coinage Law. Still there would have been no question of a change in the standard, and people in the United States, accustomed to regard the standard as unchanging and unchangeable, would have been habituated by this time to prices upon a strictly gold basis. Now it is seen that a law like the Bland Act, which really tampered with the standard, brings the whole monetary system of the country into confusion, and that this confusion can only be prevented by another catastrophic change which would have a great effect for the moment on the price of silver, and tend to throw the currencies of other countries, as well as the currency of the United States, into confusion. To some extent Italy also has been an offender in this matter, the resumption of specie

payments in that country on a gold basis being entirely a work of superfluity; the resumption on a silver basis would have been preferable. I can hardly blame the bimetallic countries in the matter, because the original sin here is one which dates very far back indeed. A bimetallic country, from the nature of the case, must be always prepared for great changes in the standard money. Chopping and changing is the law of its being. Still, it is quite clear that if France had frankly adopted a single standard many years ago and kept to it, and if other countries had done the same, each according to its own wants and necessities, none of the catastrophic changes of the last ten or fifteen years would have been necessary or thought of at all; gold and silver would, in all probability, have been more stable with reference to each other than they have been, and the currency discussions for many years past would have been entirely obviated. One of the main evils in fact of managed currencies is that in the countries which possess them, an incessant currency discussion of a practical kind is unavoidable, whereas in order to have all the advantages of a good standard it should become like an ordinance of nature, so that practically no changes are ever required. In this last respect at least our own metallic currency for the last eighty years has been perfection. England is the only great country which, during that period, has not changed its standard money.

III.

A PROBLEM IN MONEY.*

In what way is the ratio of exchange fixed between the precious metals and other commodities? There is a common notion that the function of the precious metals as money involves some peculiar relation between them and commodities in regard to the adjustment of their ratio of exchange. It is said, or assumed, that every portion of the precious metals not wanted for any other purpose, becomes "money"; that the ratio of exchange with other articles rises or falls as there is less or more "money," the fall or rise being proportionate to the change in the quantity of "money"; and that this money use is also so much the preponderant use, that nothing else is material in settling the ratio of exchange between the precious metals and other commodities. It would not be going too far to say that this notion is at the root of the bimetallic theory, so far as bimetallism is based on any consistent and substantial theory. Supplemented by the further assumption that gold and silver are not only interchangeable as "money," but that each can be made to

* Originally published in the *Nineteenth Century*, Nov., 1889.

take the place of the other, by legislation, at a given ratio, which will continue to operate until one or the other is wholly displaced, what is known as the quantitative theory of money is really the basis of the whole bimetallic structure. Holding myself the view that there is "a" relation between the quantity of the precious metals and prices, I have been frequently claimed by bimetallists as going a long way with them. I avail myself, therefore, of the present opportunity to give an answer to the question as to how the ratio of exchange between the precious metals and other commodities is fixed. I hold most fully to the view that it is fixed in no other way than is any other ratio, viz., by supply and demand, and by the cost of production of the last margin of supply necessary to meet the last margin of demand. There is "a" relation between the quantity of money and prices, but it is rather one in which prices assist in determining the quantity of the precious metals to be used as money,* and not one in which prices are themselves determined by that quantity. There are some complicated elements in the problem; but this is the substantial result. In no respect, therefore, do I go any way with the bimetallist, not even the fraction of an inch; and, apart from the interest of the present problem itself, I am the more ready to avail myself of the opportunity of discussing it, because it enables me to explain how different is my own view of the relation between the quantity

* Or rather currency. See p. 193 *et seq.* as to the different meanings of "money."

of money and prices from that quantitative theory of money which, with its supplement as above described, is the foundation of the bimetallic theory itself.

The precious metals, it is admitted on all sides, have an extensive non-monetary use. They are merchandise as well as money. But few people perhaps realise that probably this non-monetary use is *preponderant* over the monetary use itself. The assumption to the contrary is, in fact, made by bimetallists and others as if there could be no question of it. The vast stores of coin in existence and circulating in people's hands are pointed to, and the use being assumed to be entirely "monetary," this monetary use is considered to be overwhelming. What is the annual production, it is said, of the precious metals as compared with the enormous mass of money ?

But the mass of the precious metals in an uncoined form must be enormous. In the form of plate and ornaments there is endless gold and silver. The belief to the contrary appears to be due to an impression that only a small proportion of the wealth of modern societies is in plate and ornaments—that the days when people kept their wealth in this form are past. What seems to be forgotten is that the wealth of modern societies is itself such that while the proportion of that wealth kept in plate and ornaments is indefinitely less than it was, yet the amount so kept may be large in proportion to the amount of the precious metals themselves. The two proportions are entirely distinct

and unconnected. If, however, it is considered for a moment how indestructible are articles composed of the precious metals, how steady is the conversion of the precious metals into such forms, though the amount annually converted may not be large, and for how many centuries the accumulation of objects of value has been going on, it will be seen that in most of the rich countries of the world the plate and ornaments must be a large mass. It is a moderate estimate that in this country alone—in plate, in watches, in jewellery and ornaments—there cannot be less than £50,000,000 worth of gold, which represents no more than an accumulation of half a million per annum for a century, not to speak of the older accumulations at all. There is probably an equal amount of silver, though the fashion of solid silver plate has for many years died out. In England, then, the stock of gold held for non-monetary uses is probably not far short of, if not equal to, the stock held for monetary uses, which is probably little more than about £60,000,000. The stock of silver, again, in England held for non-monetary uses must be two or three times the stock of silver money, which is little over £20,000,000. This is not a statistical paper, but the figures may illustrate what the facts are throughout the rest of the civilised and semi-civilised world, where greater taste for ornaments may compensate to some extent the smaller wealth of the people compared with England. It is enough for the present purpose to indicate that there must be an enormous mass of gold and silver in existence and used for non-monetary purposes.

The demand for non-monetary purposes on the annual production is also preponderant in the case of gold, and very large in the case of silver. About two-thirds of the gold annually produced is taken for the arts; and if the consumption of India is included, as being either for simple hoarding or for the arts, and in no case for the purpose of circulating money, then the demand for gold for non-monetary purposes appears almost equal to the entire annual production. The normal demand for money proper it is almost impossible to state, owing to the amount of recoinage and other difficulties; but it may be doubted whether the annual addition to circulating gold money in normal years can be anything nearly so great. Of silver, apart from India, about a fourth or fifth of the annual production is consumed in the arts; but if the Indian consumption is included, as being mostly of a non-monetary kind, about half the annual production of silver may be considered as required for non-monetary uses.* Not only, therefore, is the non-monetary stock of the precious metals enormous, but the preponderating demands falling on the annual production are also non-monetary.

And both as regards this mass of the precious metals in existence not used as money, and the demands on the annual production for non-monetary uses, the same conditions as to the ratio of exchange of the metals with other articles must exist, as exist for those other

* Since this was written, in 1889, the production of silver has largely increased.

articles themselves in their exchanges with each other, unless in the case of gold and silver their use as money should alter the conditions. The proposition is self-evident. The precious metals, so far, are ordinary merchandise and nothing more.

What I have next to point out is that as regards even the monetary uses of the precious metals, there are different uses. There is "money" and "money." The precious metals, when used for one kind of monetary purpose, may remain obviously under the ordinary conditions of merchandise, although not obviously so when used for another kind of monetary purpose. It is convenient in any case to make distinctions, and to look at the matter in detail instead of speaking of the monetary use in a vague and general way.

Three principal kinds of employment of the precious metals for monetary purposes are apparently to be distinguished: 1. They are employed for token or *quasi*-token coinage, *i.e.*, for the retail payments of society. 2. They are employed as reserves in banks, or other hands, forming the guarantee of paper money and cheques, and thus becoming the instrument of the wholesale payments of society. With this employment may be included the use of the precious metals as an instrument of international remittance. 3. They are used as a means of hoarding. Only the first two of these employments can be spoken of, I believe, as a proper monetary employment. At any rate, although the precious metals, when hoarded, whether in coin or

in bullion, may be considered as potential money, they are clearly not money in circulation, and a distinction must be made between the use for money in circulation and the use for hoarding.

We may begin with the hoarding use. When in demand for hoarding, the precious metals, although they may be in the form of coin, remain mere merchandise. They are subject to the same laws respecting their ratio of exchange as diamonds, valuable pictures, or any other valuable object which may be hoarded. The motives of hoarding, and the price to be paid "in meal or in malt" for the hoards, determine the demand: and the price to be obtained, which acts upon both the existing hoards as well as upon the annual production, when any new hoard is in question, determines the supply. The possibility of using the hoards as money, especially when in the form of coin, may be an element in their value; but it is only one element out of many, and for this purpose, accordingly, the precious metals are practically merchandise only.

Equally with the stock of the precious metals for purely non-monetary uses, the stocks of the precious metals hoarded are very large. The military and *quasi*-military chests of military Governments like France, Germany, and Russia: the accumulations of the precious metals in those countries, far beyond any strict requirement of monetary circulation: are enormous. The United States, again, has accumulated both gold and silver in its Government vaults far beyond any ordinary monetary necessity. There are large

private hoards besides all over the world, but especially in India, where both gold and silver are largely hoarded. Whatever the motives may be which determine these hoards, the hoards themselves are not money in circulation in any form, and the demand to replenish them is not a demand for "money," and the supply of these demands is not a supply of "money," which can help to make any such relation between the quantity of money and prices as the quantitative theory of money, and with it the bimetallic theory, assume.

It is further to be noted that it is practically impossible to distinguish between the quantities of the precious metals simply hoarded and the stock in the form of ornaments where they serve another purpose as well as hoarding. In India especially it is well known the ornaments are a reserve, and are if necessary melted down. But in all cases the possibility of melting exists.

In this way, then, the use of hoarding, which is in one sense a monetary use of the precious metals, is to be included, for the purposes of the present discussion, in the category of merchandise uses where gold and silver are subject to the same conditions as regards their ratio of exchange with other articles as are those other articles themselves.

We come then to the more special monetary uses of the precious metals as above defined. And here again we find that as regards the most important of these in in respect of quantity, viz., the use of the precious metals as token money or *quasi*-token money, the

demand for them must also be viewed as an ordinary merchandise demand. The point is so important as to excuse a somewhat full exposition.

As regards all kinds of token money, then, I have to put forward the proposition that the general economic circumstances of a community of which the range of prices of staple articles is an important part, but still only a part, determine in ordinary circumstances the quantity of the precious metals used as money in circulation in that form. The range of incomes seems even more important in this connection than prices ordinarily so called; but the two are interconnected, and incomes are a part of "prices," using the word in its most general sense. Further, the quantities of the different kinds of the precious metals so used as money may be considered as a fixed amount of each kind per head of the population, or rather an amount oscillating between fixed limits according to the seasons and the ebb and flow of credit. The amounts at any rate do not vary proportionately with small or ordinary fluctuations of prices, though they are liable to great changes with changes of magnitude in economic circumstances, including, in such changes of magnitude, great changes in the range of incomes and the range of prices of staple commodities.

Take first the case of copper or nickel money, which is all the better for illustration because copper and nickel, though used for token money, are not precious metals. Apparently, then, for a community of given numbers in a certain state of civilisation and economic development,

only a definite amount of such small money is required, whatever the range of prices may be. The same (or nearly the same) copper money will do the work which copper has to do in such a community at almost any range of prices. The statistics of copper coinage show that it is a machine whose size is increased automatically as population increases—more rapidly, perhaps, in good times (when prices rise) than in bad times (when prices fall), but not in such a way at any time as to make any proportion between the changes in quantity and the changes in prices.

What is true of copper money is true of silver money in a country like England. This money being wanted for small change, the quantity in use varies only as copper money does, and from similar causes. The determining factor is a custom and habit of the people which requires so much silver money per head. At a point, no doubt, silver might tend to go out of use, and copper come in on the one side in place of it, and gold on the other; but the limits of change are apparently very wide.

Mutatis mutandis, it is obvious, the same remarks must apply to that part of the gold money in a country like England which is either explicitly token money or which, though standard money and unlimited legal tender, is really used as a kind of small change only—that is, the whole stock of gold coin in a country like England which is neither held as reserve in the Bank of England nor hoarded, the banking system reducing the uses of gold coin in circulation to those really of

small change only. The amount of such small change must be viewed as strictly regulated by the habits and customs of the people, remaining at the same chronic amount with given habits and customs, and not changing—or, at any rate, not changing greatly—according to the ordinary fluctuations of prices.

The point when stated is so obvious as to seem hardly worth labouring; but it may be pointed out that the analogy of the circulation of paper money of small denominations in a country where the quantities of such paper in circulation are exactly ascertainable quite supports the conclusion, although so little is known of the circulation of gold itself that it cannot be directly proved. The paper (and this is true of inconvertible as well as convertible paper) is very nearly a fixed quantity per head in such countries, or rather a quantity varying between fixed points according to the seasons, and it hardly seems to vary with prices within very wide limits indeed. Even when it seems to vary with prices a little, the variation in the demand for the precious metals that would arise, on similar changes occurring in the requirements of those metals for small change, would be extremely small in proportion to the volume of the metals used for monetary purposes generally, and still more in proportion to the volume of the metals in use for all purposes.

Of gold, therefore, as token and *quasi*-token money, as for silver and copper, it may be said that the quantity is a comparatively fixed amount—an amount at any rate not varying with small changes in the range

of prices of staple articles, and never changing proportionately.

The same remarks would of course be true of silver, when it is the unlimited legal tender and standard money of a country, as regards that portion of the so-called standard money which is really used as small change. The nature of the use has to be considered rather than the nominal character of the coinage.

We have still, then, only "merchandise" to deal with as regards this important monetary use of the precious metals—a more important use, in respect of quantity, it may be noticed, than the use of the metals as reserves, although in another respect the use as reserves is the most important by far of the monetary uses. It is by the reserves that wholesale payments are made, and the money so used must possess by law or custom the quality of standard and unlimited legal tender, but the quantity of the precious metal required for this purpose is not large in amount in comparison with the quantity used for small change.

Coming finally, however, to the use of the precious metals as reserves, we find that here again the demand for the precious metals is usually a demand for a fixed quantity, or rather a quantity varying between fixed points, dependent on the habits and customs of a commercial community in given economic circumstances among which the range of prices is only one of the factors. It is not a demand which varies materially or sensibly with ordinary fluctuations of prices. As I

have elsewhere explained, the reserve has great regulating power, and the changes in it and its normal amount may be significant of contraction or expansion of standard money, or rather the material, whether gold or silver, of which it is made. But the variations cannot alter seriously the demands upon the precious metals themselves. The highest reserve in the Bank of England for many years has been little over £18,000,000, while the more usual fluctuations have been between £10,000,000 and £15,000,000.

In speaking of banking reserves, I have had England mainly in view, as almost the only great country with a genuinely automatic money market. In other countries, such as France, Germany, and the United States, the so-called reserves are rather hoards than reserves—potential money, not actual money, to which therefore the same rules would not apply; but wherever the function of a reserve exists, its tendency to be a fixed quantity, or a quantity oscillating between fixed points, and oscillating without any special reference to the usual fluctuations in prices, is manifest.

What is true of reserves so-called seems also true of that portion of the money used as a guarantee of wholesale payments which is remitted to and fro, and is at one time part of the reserve in England, at another part of the reserve in France, and so on. The whole reserves and precious metals in course of remittance in the civilised world may be considered a single fund which varies even less as a whole than the particular parts of it in individual countries.

To conclude, then: the demands for the precious metals as reserves, like the demand for them for other monetary purposes, is thus, in fact, a demand for them as merchandise; and in all respects accordingly the precious metals are merchandise only. It is undeniably so as regards their non-monetary uses, which are the most important in amount. It is equally so as regards the *quasi*-monetary but really merchandise use of hoarding, the next important in amount; equally so as regards the use for token money or small change, which comes next; and equally so as regards the use for "reserves," which comes last in amount and is really very unimportant in that respect. In effect, then, the ratio of exchange between gold and silver and other articles can be fixed in no other way and by no other influences than those which affect those articles. There is absolutely no difference in gold and silver from any other merchandise, and the theories which presuppose some special and peculiar difference, because the precious metals are used for money, is a palpable delusion. It has no foundation in the actual facts of the uses of the precious metals.

We may go a little farther and affirm that, so far from the money demand proper being the regulating demand, in the adjustment of ratios between the precious metals and other commodities, that money demand can hardly ever be the regulator. The reason is that it is a demand, as we have seen, mostly for a fixed amount of the precious metals, and it is a demand at the same time of a very imperative kind, which will

be satisfied at almost any ratio of exchange with other commodities, because money serves a great necessity, and the amount required is at the same time so small in proportion to the wealth of modern societies that the price paid for it is unfelt. The money demand, therefore, can hardly ever be that last margin of demand to which the last margin of supply is adjusted, and by which the ratio of exchange between the precious metals and other articles will be finally settled. Gold and silver, therefore, while used as money, are not only merchandise, but the regulator of the ratio between them and other articles must almost necessarily be some other than the money use.

What becomes then of the theory which I admit to be true, that there is "a" relation between the quantity of money and prices? The quantitative theory of money, which proceeds on the assumption that there is a pool of money into which a balance of the precious metals falls after other uses have been satisfied, and that prices rise or fall proportionately with an increase or diminution of the pool, is obviously not true; but it does not follow that there is no relation between money and prices.

A relation of some kind then is established by the fact that the consumption of the precious metals for money, as for other purposes, must tend to increase, other things being equal, when they are relatively cheap, and to diminish when they are relatively dear.

I do not believe that the consequent variation in ordinary circumstances can be very great as regards the use of precious metals for money, because the money demand is itself so imperative; but there is probably some variation. There is nothing special, however, in this variation to take away from the precious metals their quality of merchandise.

Again, while the quantities of the 'precious metals used as money are usually of fixed amount, given a certain economic condition, and customs and legislation of a certain kind, yet in extraordinary circumstances—that is, on great changes of prices or other economic conditions occurring—the quantity of different sorts of the precious metals required for money use may be greatly changed. A country rising in the economic rank advances from the use of copper or nickel mainly to a larger use of silver; from silver in the same way to gold; and from both silver and gold to paper and other substitutes for metallic money. With prices and incomes in England and other civilised countries a tenth of what they are now, there could hardly be the same use for gold that there is, and perhaps not even for silver. Always, however, the metals remain merchandise, and it is the prices which determine, or help to determine, the quantity of them to be used as money, not the money the prices.

I have explained elsewhere in what way probably the abundance or scarcity of the precious metals may involve a fall or rise in the ratio of their exchange with other articles, and may be associated with changes in

the quantity of money used.* In times of good credit, if the precious metals happen to be abundant and easily procurable, the tendency will be for the reserves of money to accumulate more rapidly than at other times, and for prices to rise more than they would otherwise do, until reaction sets in. In times of bad credit the reserves would begin to accumulate sooner after the crash, and the fall of prices would also be arrested sooner than would otherwise be the case. But the precise mode in which a change in the quantity of money used is brought about is, of course, only a detail. The essential point is that it takes a catastrophic change in prices, or in some other economic conditions, to make any sensible change in that quantity.

In these ways then, although the quantitative theory of money as above stated is not true, it is still true that money and prices are related. But the relation is of an entirely different nature from that of proportional quantity, and is based on the fact that the precious metals when used as money are merchandise still, and have their ratios of exchange with other articles fixed in no other way than any other merchandise.

It may be admitted, however, that the function of the precious metals as money affects the ratio at which they exchange with other commodities in *one* very special manner, differently from anything which is observable as regards any other commodities. There is an oscillation of the prices of staple commodities due

* See 'Gold Supply, Rate of Discount and Prices. Essays in Finance,' 2nd Series.

to the ebb and flow of credit, and the effect is, that any commodity used as money falls in exchangeable value when credit becomes good, and rises when credit becomes bad, although if it were not used as money, and some other commodity were so used, it would probably move in the opposite direction along with the commodities. But these oscillations must be confined within the most narrow limits. The chronic ratio of exchange between the precious metals and other commodities is not concerned. To the extent that a ratio is established different from what the chronic ratio tends to be, causes are set in operation which operate to restore the equilibrium.

But allowing for such oscillations and exceptions, which are most slight after all, the chronic ratios of exchange between gold and silver and other commodities are not determined by any special qualities these metals have as money. It is the range of prices as part of a general economic condition which helps to determine the quantity of money in use, and not the quantity of money in use which determines the prices.*

Having answered the main question with which I started, I might stop at this point; but it may be useful to go on and answer a connected question, which belongs to the supplementary hypothesis of the bimetallic theory.

* And of course the quantity of the precious metals in the market is an element in fixing their value as the quantity supplied is an element in fixing the value of any other commodity. See *postea*, p. 216 *et seq.*

Not only is a pool of money assumed by the theory, and a rise or fall of prices with the increase or diminution of the pool, but gold and silver, as forming the pool, are assumed to be interchangeable, so that the one can displace the other. There is no such pool, as we have seen, and that might be the end of the question; but neither is there any such interchangeability between gold and silver as is supposed.

Take the case of token money. Copper, it is clear, supplies one want; silver another; gold another. A community requiring actual metallic money for certain classes of payments must have either gold or silver, or an inferior metal, according to its special wants. It has no choice in the matter at all.

The fact that either one or the other metal may be dispensed with in actual circulation by the substitution of paper does not alter the fact that, if the demand is for metallic currency at all in actual circulation, it must be for the metal which can perform the desired work. The metals in this respect are not interchangeable.

The want of interchangeability is not so evident when the precious metals are used as reserves in banks and other hands as the basis of wholesale payments, but it seems evident that even here gold is the more convenient metal for advanced communities, as the more easily handled, and as the most convenient for remittances over great distances. There is no complete interchangeability between it and silver. In any case it is an absolutely unavoidable *necessity* for communities, by legislation or custom, to select one or the other metal

for its unlimited legal tender, which accordingly will be the metal in which reserves will be held. Where a community, following the ancient practice, which prevailed before good token money was invented, tries to keep both gold and silver in circulation as unlimited legal tender by a dual legal tender law, and endeavours to carry out the law, that metal which exchanges for the other at a less price than the legal ratio,—which is overvalued by the legal ratio, as the phrase is,—will be used exclusively for the purpose of unlimited legal tender, and the demand for it will be the same as if it were the single unlimited legal tender of that country. There can be no interchangeability in practice between the two metals.*

There is also a complete difference between the two metals in regard to the objects for which they are hoarded and the circumstances under which they are hoarded. One community hoards gold, another silver,

* This was the doctrine of Locke and the English economists, and it impresses me the more, the more I have studied the subject. The experience of France between 1803 and 1873 is often referred to as showing that the two metals can circulate side by side as full legal tender. But having considered all the facts carefully, I find they are entirely such as to confirm the older economists. France never had both metals in use at the same time as full legal tender and standard money. The two metals were always in use as different kinds of token money or *quasi*-token money; but the full legal tender was practically for one period, 1803–50, silver only, and for another period, 1850–73, gold only. Gold and silver were never both used as unlimited legal tender together. Gold and silver *coins* might have been so used as monopoly coins, as silver coins are now used in France, without infringing the principle laid down by the older economists, which was absolutely true. What

another both in uncertain proportions. Governments hoard both, from a variety of motives, but preferably gold for military purposes. While hoarding, therefore, is a most variable demand, there is hoarding and hoarding, and the one metal cannot take the place of the other for this purpose.

Accordingly gold and silver are not only in no special relation to commodities as money, causing the ratio between them and commodities to be fixed in a different way than the ratios among commodities themselves, viz., by supply and demand and cost of production; but as money they perform different functions, and they are never interchangeable, or at most very partially so. The supplementary bimetallic hypothesis is then as unfounded as the primary hypothesis that there is a margin of the precious metals after all their other uses, which becomes available for money, and that prices rise or fall according to the size of the margin. There is not only no such margin as is imagined, the money use being rather the first use; but if there were, gold and silver could not take each other's place in the margin. When used for money they are really used each in a

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they spoke of as being incapable of circulating together was the metals, or coins made of them without any seignorage; coins on which a seignorage had been charged, or which had become degraded by use, might so circulate for a time until the ratio between the metals changed to such an extent as to permit of the one or the other sort of coin being melted. But such a limited circulation of monopoly coins does not show that the metals themselves could circulate together at a ratio.

special way, and not in such a way that the one can take the place of the other.

The conclusion being so clear, one may well wonder how a theory so baseless came to be formed. I am not sure that I have been able to get together the whole history; but some points seem clear and instructive. After so much bimetallic clamour as we have had, sober men may be interested to see how overwhelming is the economic opinion against the bimetallist, and how little claim bimetallism has to be a competing monetary theory with monometallism.

The great English authorities on currency, including some of the greatest names in economics—Locke, Harris, Lord Liverpool, Adam Smith, Ricardo—were not aware of the peculiar theory which bimetallists advocate, and took for granted that the ratio between the precious metals and other commodities was settled, as all other exchange ratios are settled, by supply and demand, higgling of the market, and cost of production. There is not one syllable in their writings to imply any other theory. Upon this Locke based his mathematical demonstration, universally accepted last century, that there could not be two standard metals, because the articles being different the two could not remain for any length of time at any given ratio, but the ratio would necessarily change.

Hence Locke recommended that only one should be standard, and that the other should be used in payments at a ratio—to be fixed by the market from time to time.

Harris and other authorities preferred that Government should fix a ratio which would be followed in Government transactions, and probably largely in other transactions; but they equally contemplated that the ratio would require changing from time to time according to the market. The idea that the Government by its action in coining, in accordance with some special property of money, would cause gold and silver to interchange with each other at the Government ratio until one or other was wholly displaced, did not then exist. No such property in gold and silver as money had been observed by those great authorities, although all countries had ratios, and there were even proposals as early as the seventeenth century for a universal common ratio.

In truth, so little suspicion was there of any such theory that it is quite certain the coining of both gold and silver, and their acceptance by Governments at a ratio, originated, and was continued, on considerations of practical convenience only. Gold was the most convenient metal for the larger payments; silver for the smaller. Both had to be coined because there were different classes of payments. When Lord Liverpool, following Adam Smith, suggested and elaborated a plan for token money, by which the metal which was not the standard could be brought into use for the special payments for which it was convenient, without the special risk of melting down to which the undervalued metal in a bimetallic *régime* was exposed, then it was felt by all the authorities that the problem of metallic money had been solved. One metal was to be the

standard, and the other was to be related to the standard in such a way that, while it could be used conveniently, the risk of melting it down would be enormously lessened.

This universal consensus of opinion last century was manifested, not only in England but in other countries.

In the United States coins of both gold and silver were introduced after the Declaration of Independence, on a bimetallic basis, but without the hint of an argument that the ratio would exist permanently, or that the action of the Government would tend to fix it. The whole object was to get both metals into use, having regard to the special payments for which they were adapted—to effect the objects which are now effected by standard and token money together. Lord Liverpool's scheme of token money came later, and was not before the American authorities. But there is not a glimmering, in all the American writing, as far as I have observed, of the peculiar monetary theory on which bimetallism is now based.

The same may be said of the French legislation at the beginning of the present century. Indeed, in the discussions which preceded the great French law of 1803, the authority of Locke and Newton was recognised; and, in coining both gold and silver, the French law declared silver alone to be the standard, the coinage of the other metal being only recognised in payments at a ratio. In the original draft of the law it was provided that when the ratio had to be changed, only the gold should be recoined; but, although this provision was subsequently omitted, it was from no anticipation that

a change in the ratio was practically out of the question, or that the law itself would tend to maintain the ratio. There is not a syllable to that effect in the whole debate, nor a whisper of that monetary theory on which bimetallism is based.

The French Legislature had not Lord Liverpool's plan of a token money before them. The legislation of 1803 in France preceded the famous treatise on the coins of the realm. It is too much to assume that so novel a plan would have been accepted in France if it had been before the authorities at the time; but the acceptance of it would have been quite in accordance with all the practical considerations stated in the debate in favour of the coinage of both gold and silver.

As late as 1816, when the single gold standard was formally adopted in England, and the coinage of silver as token money only was resolved on, there is still no hint of the peculiar bimetallic theory. The single standard was adopted unanimously and cordially, as a thing about which there could be no question. Mr. Wellesley Pole (Master of the Mint), in proposing it, made the following declaration, which it may be useful to quote textually as showing, in conjunction with the unanimous acceptance of the proposal, the strength of the authorities—as matters stood at the beginning of the century—against the possibility of a fixed ratio:

"When the committee took into their consideration this short view of the history of our circulation, he believed he should be anticipated in his opinion that it could not be expedient to allow the coins of both the precious metals to be equally legal tender and

standard money of the country to an unlimited extent. It had been the opinion of, he believed, all the eminent men who had written upon the subject, that there should be but one standard measure of value. Sir William Petty, Mr. Locke, and Mr. Harris upon this point had all concurred. Mr. Locke says that money, as the measure of commerce, ought to be kept as steadily and invariably as may be; but this cannot be if your money be made of two metals, whose proportion, and consequently whose price, constantly varies in respect to one another. Sir William Petty declares there can be but one of the two precious metals of gold and silver fit to be a matter of money. Mr. Harris observes, that only one of these metals can be the money or standard measure of commerce in any country. In later times, after a further experience of the evils arising from the collision of two standards, from the competition raised between the coins of the two precious metals, these opinions had been strengthened by the writings of Mr. Alcorne and Dr. Adam Smith, the late Lord Liverpool, and lastly by the report of the bullion committee. All these authorities had agreed that the standard measure of value, the standard coin of the realm, should be composed only of one of the precious metals. He believed, therefore, that it would be universally admitted that there should be but one standard coin of the realm, to be at once the measure and equivalent of property." *

So strong and so unanimous was opinion down to 1816 and afterwards against the possibility of a fixed ratio between gold and silver. Voices were indeed raised in favour of silver rather than gold as the single standard (which all were agreed on), but not strong voices. The only spokesman for this view in the debates was the Earl of Lauderdale. Ricardo, a greater authority, was predisposed in favour of a silver standard; but before the resumption of specie payments

* *Debate on Silver Coinage:* extract from speech by Mr. Wellesley Pole on the 30th of May, 1816. From Hansard's 'Parliamentary Debates,' vol. xxxiv. 1816, col. 946.

in 1820, he intimated his adhesion to gold as the single standard, partly on the ground of an anticipated fall of silver. Opinion, however, was quite unanimous, on the passage of the Bill of 1816, in favour of a single standard—so unanimous, indeed, that the possibility of what is now known as the bimetallic theory does not seem to have been dreamt of.*

Of course, no question can be settled by authority. Locke, and Adam Smith, and Ricardo, and many more, may all have been in error, and blind not to discover the special nature of money which made a fixed ratio possible. But, in addition to the usual reasons for respecting authority, we must recollect that in this matter the great authorities of last century and the beginning of the present century were dealing with the subject as one of urgent business—Locke, Newton, Harris, Lord Liverpool, as part of their official duty—and that the subject was looked at by them in all its aspects, and keenly studied. When and in what circumstances the opposite bimetallic theory grew up, who were its discoverers and expounders, what they knew of the previous inquiries and discussions—become, in these circumstances, matters of interest. If the new theory is a respectable one, we should expect to find

* When this passage was written I was not aware of an actual bimetallic proposal having been debated in 1830, when Sir Robert Peel and other eminent authorities took part. I have thought it interesting to add some passages from this debate in the Appendix (See Appendix B.). The bimetallists of 1830 were quite frank in their avowals that they desired to pay their debts in a cheaper metal than gold at less than the market ratio.

an intellectual continuity in the discussions, and that the errors of authorities like Locke, Adam Smith, and Ricardo are carefully analysed and exposed, and the facts supporting the new theory (which these authorities had passed over) explained.

When we proceed farther, however, we find that the idea of a fixed ratio being made by the legal ratio had an almost accidental origin, and was not based on any refutation—and not even on a discussion—of the views of the great authorities who had previously discussed the subject. The bimetallic theory, in fact, had its origin in a mere blunder—a misinterpretation of certain facts as to the common use of gold and silver in France under a bimetallic *régime*, and the invention of a theory to suit these misinterpreted facts by authors who, to all appearance, were totally unacquainted with the previous discussions. Shortly after 1820, travellers to France, and those acquainted with it, remarked that gold and silver "coins" were circulating together freely, and it seemed to them that practically the expedient of token money as in England was uncalled for, and it would be more convenient that the French plan should be followed, so that both countries should have the same system. This was the view of Mr. Baring (afterwards Lord Ashburton), who seems, however, to have stood alone in England, and not to have invented any elaborate theory. By Sismondi, however, who appears to have written at the same time, the theory is set out in pretty much the language used above, the real reason

for the circulation of gold and silver coins together at the time being entirely overlooked. His observation was that gold and silver, under a bimetallic law, not only pass at the legal ratio, but are used, for the most part, for purposes which make it indifferent whether gold or silver is used, and only partially for special purposes where they cannot be used interchangeably. Sismondi states expressly that he considers, as regards seven-eighths of their quantity, gold and silver coins are used interchangeably, and only the remaining eighth for special purposes. Hence his argument (the first I know of expressing the "scientific" theory, as it is called, of bimetallism *) that there is a certain play between gold and silver used as money, the one taking the place of the other up to a point—though he admitted quite explicitly that the ratio might not be permanent, and that the persistence of an agio for one or the other metal would be a warning to the legislator of the necessity for changing the ratio.

Such is the origin of the theory of a fixed ratio as far as I have been able to trace it. Whether Sismondi borrowed from anybody else I do not know, nor how far our modern bimetallists have borrowed directly, or at second-hand only, from Sismondi, but there appears to be no complete exposition of the new theory to be

* It has been pointed out to me since this was written that there is a German author shortly prior to Sismondi who is quoted by M. Wolowski as putting forward much the same theory, and that germs of the theory are to be found in older writers still. But practically in the recent controversies it is Sismondi on whom our English bimetallists have relied. See note, *postea*, p. 111.

compared with the older treatises in which the great authorities have explained the impossibility of a double standard. It is always the Sismondi theory one runs against, and this theory, let me again repeat, is the theory of a writer who does not seem to have studied the subject; who makes no reference to Locke, or Adam Smith, or Lord Liverpool, or Ricardo; and who writes, it must be added, in rather a slipshod manner.

Sismondi, however, being the root-authority, it may be interesting to quote his *ipsissima verba*, as we shall then have the bimetallic theory in its pristine simplicity before us:—

"Si le gouvernement fait choix d'un seul métal pour étalon, et s'il déclare que l'autre est marchandise, comme on l'a fait ou proposé à plusieurs reprises, cet étalon se trouvera affecté par toutes les variations annuelles du produit des mines. Si, au contraire, il adopte et légalise la proportion qui lui paraîtra dominante dans le commerce du monde, par exemple, aujourd'hui, celle de quinze pour un; s'il déclare que toute dette d'une once d'or pourra être légitimement payée avec quinze onces d'argent, et réciproquement, ainsi que cela se pratique en France, la mesure commune du commerce ne s'établira pas sur la quantité annuelle produite par les mines d'or ou par celles d'argent, mais sur une moyenne proportionnelle entre les variations que subiront ces deux quantités, et l'étalon désiré en acquerra plus de fixité.

"En effet, il paraît que la circulation s'accomplit également sans inconvénient, soit qu'un quart, un huitième peut-être, du numéraire soit en or, et tout le reste en argent, soit, au contraire, qu'un quart ou un huitième soit en argent, et tout le reste en or. Tant que la proportion entre ces deux métaux ne dépassera ces limites si éloignées, la Monnaie frappera indifféremment ou de l'or ou de l'argent, selon que le prix des lingots de l'un ou de l'autre lui offrira plus de profit, et qu'elle pourra les acheter à meilleur marché; mais, si la disproportion devenait telle qu'on ne trouvât ou plus d'argent pour les appoints, ou plus d'or pour les voyageurs, le commerce offrirait

un agio pour l'une ou pour l'autre espèce de numéraire, comme il en offre un assez généralement pour l'or en Italie ; et par sa persistance à offrir cet agio, il avertirait le gouvernement qu'il est temps de changer la proportion légale, et de se conformer à celle qu'établirait le profit comparé des mines." *

To quote this passage is to my mind to show the absurdity of the pretensions of the modern bimetallist. Not only does Sismondi introduce the subject as if it had never been discussed before him, and ignore the theory, deduced from long experience, upon which the English people, at the very time he was writing (1820), had just established their monetary system; but his cardinal observation, upon which the theory is based, as to a fourth or an eighth part only of gold and silver money being required for the special uses of those metals, and the remainder being required for purposes for which the other metal is equally serviceable, is entirely unsupported by evidence, or reference to any evidence. It is palpably untrue, and if it was true in 1820 in any degree it is completely untrue now in every civilised country. Sismondi's assumption that

* Sismondi, *Nouveaux principes d'économie politique*, tome ii. pp. 59-60, seconde édition. Paris, 1828. In replying to me on this head a leading English bimetallist, Professor Nicholson, disclaimed the authority of Sismondi, remarking that "it is surely a most singular perversion of thought and language to ascribe the theory of a ratio fixed permanently by a group of nations to a writer who makes no mention either of fixity or of international action." But another leading English bimetallist, Mr. Grenfell, after quoting a portion of the above extract from Sismondi, remarks: "Now the above is what we want to have answered; it will not answer itself."—See 'The Bimetallic Controversy,' p. 216.

the metals would tend to exchange at the legal ratio is equally unsupported by evidence, whereas it not only requires evidence, but it was the unbroken experience of centuries when Locke took up the question, as it has been the experience ever since, that side by side with the legal ratio there is immediately a market ratio, and there is no discernible tendency for the former to govern the latter. The foundation of the bimetallic idea is thus rotten from the beginning, and there is no discoverer or great economist to set against the chain of authorities by whom the opposite system has been established.

It is important to notice, moreover, that Sismondi does not indorse the quantitative theory of money itself. What the play is to be between gold and silver, as he sets it out, is by no means clearly expressed. That they are to constitute a pool into which both are to fall, the one taking the place of the other, is assumed; but he does not assert that prices are to be proportionate to the size of this pool, only that they are to be dependent on the cost of producing both gold and silver, instead of the cost of one only. It is a significant difference, also, between Sismondi and his followers, that even he does not anticipate the indefinite continuance of any ratio, but points to circumstances in which the ratio may have to be changed, while the choice of the ratio to begin with is to be a "dominant" ratio, whatever that may mean. It was reserved to more recent and popular enthusiasts to preach the unchangeability of the ratio.

Sismondi, however, is obviously no authority on this question, not having studied it at all. Note, for instance, that he speaks of the ratio at the time he wrote as 15 to 1, whereas the famous 15½ to 1 was "established" in 1803, and had thus been nearly twenty years in existence when Sismondi published his book. The error was retained in the second edition, published in 1828.

Such as he is, however, Sismondi is not only the original but he is still the leading authority, as far as I know, for the bimetallic view, and I know of no fuller exposition of the theory of a fixed ratio, which appears simply to have grown like a fungus assimilating any other theory which happened to be handy, as it has done with the quantitative theory of money. Not only are there no exponents of the bimetallic theory to set against the exponents of the monometallic theory, which has a greater array of economic authority on its side than almost any other conclusion which can be named, but there is no consistent exposition of principles and facts anywhere which can be appealed to at all by the bimetallic rank and file.

There is nothing, therefore, in the genesis and development of the bimetallic theory of a pool of money and an interchange between gold and silver to entitle it to any respect. The theory is itself rotten throughout, as we have seen, and it is of bastard origin altogether. It is not in the line of economic tradition at all, paving the way for something better, as a first hypothesis to explain difficult facts, and useful therefore, notwith-

standing errors, in the historical study of the subject. It comes, on the contrary, after a true and sufficient theory had been expounded by the greatest authorities, on which the student must still fall back, passing over altogether the bimetallic theorists, who have only interrupted and obstructed the study.

The general conclusions arrived at may now be very shortly repeated. The precious metals all through, whether used for monetary purposes or not, are merchandise, and the ratio at which they exchange with other articles is determined in precisely the same way as the ratio between any other commodities—as the ratio, for instance, between copper and wheat, or between beef and shoes. The uses of gold and silver for non-monetary purposes are also much greater than is commonly supposed, so that their money use is not preponderant; but in any case their use for monetary purposes does not create conditions for regulating the ratio of their exchange with other articles different from those which exist for other commodities themselves. The relation of quantity between money and prices is again a relation in which the determining factor is the prices which contribute to fix the quantity of money to be used and which are not in ordinary circumstances fixed by it. The use of the precious metals as money is not unimportant with reference to the ratio at which they exchange with other articles, because the demand for money uses enters into the whole demand, but it

does not alter the character of the precious metals as merchandise. Further, even when used for monetary purposes, gold and silver are different articles, and there is very little, almost no interchangeability between them: the one cannot take the place of the other. Apart then from other objections to the bimetallic theory, it is found to be based upon a thorough misconception of the relations between the precious metals and other commodities and the way in which a ratio is established between them, and as to the degree of interchangeability between the precious metals themselves. The theory presupposes, first, that there is an immense balance of the precious metals, the greater part of them left over after non-monetary uses, and that prices rise or fall according as this balance increases or diminishes; and, next, that gold and silver, as forming this balance, are interchangeable with each other at any ratio Governments may fix; whereas, in point of fact, the demand for the precious metals as money in various forms is one of the most imperative and first to be supplied, and is also, if we exclude the hoards as not properly money, a comparatively small demand; and next, the requirements for the two metals, even for monetary uses, are of a totally different kind, so that, as their non-monetary uses predominate, there is no practical interchangeability between them at all, and Governments consequently have no more power to fix a ratio at which they will exchange with each other than they have to fix the ratio at which timber will exchange for iron. In other words, bimetallism is a pure

delusion and nothing more. The history of the idea is, moreover, very far from creditable to its originators and adherents, and would dispose the student to pass it over, even if its absurdities were less flagrant than they are.*

* After the publication of this article my attention was called to a paper read by Professor Adamson at the Manchester Statistical Society in 1884, in which the same account was given substantially of the commodity character of a precious metal used as standard money, and the manner in which the amount of such metal used as currency is determined. The paper of Professor Adamson is most deserving of study by those who are interested in these questions.

IV.

THE INEVITABLE RESULTS OF UNIVERSAL BIMETALLISM.*

NOTWITHSTANDING some merits as a condemnation of bimetallic proposals in their practical aspect, the report of the so-called monometallic section of the Royal Commission on Gold and Silver—what should perhaps be preferably called the non-bimetallic section, for some of the gentlemen belonging to it can hardly be called monometallists—was extremely unsatisfactory to some of us who are students of political economy, on account of the theoretical admission that if the leading Governments of the world agreed, in bimetallic parlance, to coin gold and silver at a fixed ratio at all approaching the present market ratio, then such ratio might thereby be maintained for a time. Much of the value of this sectional report was destroyed by the admission.† The bimetallists are clever enough at tactics, and they are

* Printed as a letter to the *Times*, 26th December, 1889.

† It should have been noticed here that two members of the monometallist section of the Commission—Sir John Lubbock and Mr. Birch—dissented from this part of the report, and expressed a much more cautious opinion, adding their conviction that such a ratio could not be maintained permanently.

not slow to make the most of such an admission. After all, they say, they are not separated in principle from monometallists who agree with them on such a point—it is only a question of degree between them as to how far Governments can establish a fixed ratio.

Others who are monometallists practically also make similar admissions. The failure of bimetallism in former times, when nations were isolated in their practice, is recognised; but there is an impression that all Governments combined, or a few Governments combined, may succeed where singly they fail.

Even in the extreme case suggested, however, it may be demonstrated, I believe, that a fixed ratio would not be maintained except by accident—that the legal ratio would have hardly any, if any, virtue to make the market ratio the same. And this is at bottom the final and conclusive answer to the bimetallist. A dual standard and a dual unlimited legal tender, as the consequence of merely coining gold and silver at a given ratio, and making them legal tender at the ratio, are in practice an impossibility.

There is a curious initial difficulty in the matter. International bimetallism, at any ratio likely to find favour with bimetallists, cannot be introduced at all in countries with an existing monometallic gold standard except at the cost of a financial crash to which the world has yet seen no parallel. What bimetallists desire is that gold and silver should be made legal tender at a ratio in which silver would be rated at a

higher value than it now is. Silver is to be raised in price relatively to gold, and a ratio of 20 to 1 or 18 to 1, or even, as bimetallists hope, the providential 15½ to 1, is to be adopted, instead of the actual market ratio of 21 to 1 or thereabouts. This is the essence of the bimetallic agitation. Is it not clear, however, that on the bare announcement of such an intended law, or the moment such a law looks like business, every creditor who can now claim an ounce of gold, exchanging, at present market rates, for 21 ounces of silver, foreseeing that in a short time he will be forced to accept only 20, 18, or perhaps even 15½ ounces of silver where he is now entitled to the equivalent of 21, would call in his debt at once? And as there are some 600 millions of banking liabilities in this country alone, liabilities at call or short notice, the result must be universal bankruptcy. Even a very slight over-valuing of silver would have the same effect. No creditor will submit to be "done," even in appearance, by the smallest fraction. Panic, therefore, there must be on the announcement or second reading of a bimetallic Bill; and in the face of a panic the Bill, of course, would go.*

* *Cf.* extracts from Hansard's Parliamentary Debates, 1830, Appendix B, p. 240. When I wrote the passage in the text I was not acquainted with the debate on the bimetallic proposal of Mr. Attwood in 1830. Substantially the same answer was given by the responsible minister then as I have given here. The proof that the passage was not at all too strong has since been given by the alarm and hoarding of gold in the United States in the autumn of 1890 consequent on the free coinage agitation. I should like also to refer in this connection to the Blue Book of 1865, containing the official papers relating to the proposal of the Calcutta Government of

Admitting this difficulty to be got over, and that the leading nations or all nations agree on a law of the kind bimetallists desire—that is, establishing a ratio in which the price of silver is raised a little—another preliminary difficulty must be encountered, as the non-bimetallic Commissioners point out. The communities concerned may not take to the law. People may avail themselves of such a law to pay their debts with, if their creditors are not too sharp for them; but creditors are masters of the situation as regards future bargains, and by universal consent commercial communities may contract themselves out of such an Act. The gold standard was, in fact, brought into use in England by the community contracting in this manner, and the experience of inconvertible paper shows that people are ready enough

that day to introduce a gold standard and gold currency into India by the gateway of bimetallism, gold being at first a little underrated to avoid any shock, but the ratio being such that it would very soon, it was hoped, become the overrated metal, and so gold money be gradually introduced without shock. What I have here stated is the groundwork of the whole proposal, *viz.:* that you cannot introduce a bimetallic law in a country having a monometallic standard, avoiding a shock, except by overrating the metal in use at the time. If you overrate the metal not in use, you cause a shock and panic. The whole discussion is most interesting, especially General Mansfield's exposition of bimetallic theory, and Sir Charles Trevelyan's minute explaining the proposal of the Indian Government. See Return "East India (Gold Currency)" No. 79, September 1865. The whole return is referred to, but those who have little time to follow up the discussion would perhaps find it sufficient to read the paragraph at the foot of p. 86, beginning with the remark that the first and most essential principle of the proposal is that "the rate fixed shall be rather below than above the present price of gold."

to use other than their legal standard money if they do not quite like it. The City of London, I am convinced, will unanimously contract itself out of such an Act. But if one or two leading communities act in this manner, what becomes of the bimetallic law? The world remains monometallic as before.

Admitting, however, that this further difficulty is got over, and that a universal bimetallic law is everywhere nominally accepted, without any community formally contracting itself out of it, what is going to happen? Experience helps us to give an answer to this question also.

First of all, in the present circumstances of gold and silver, and their demand and supply, the *bonâ fide* attempt to work such an international bimetallic law must be the universal establishment of a monometallic silver standard. Silver is *ex hypothesi* to be overrated as compared with the present market price, and silver, therefore, according to universal and unbroken experience, will become practically the single standard, and the sole unlimited legal tender. You cannot have both metals used in this way at the same time, and if a bimetallic law is accepted, the metal overrated according to the ratio will come into use as practically the sole standard and unlimited legal tender.

Gold need not, therefore, go much out of use, and is not likely to go much out of use, as compared with its uses at present; as far as amount is concerned, it is

mainly used now for purposes where its quality as standard and unlimited legal tender is immaterial; for these purposes it will be used as before. This was pointed out by Locke two hundred years ago, even as regards the money use of gold, when he showed that the abandonment of the attempt to fix a ratio between gold and silver, silver being the standard money, need not drive gold out of use even as money, because it could continue to circulate at the market ratio, whatever it might happen to be. The recent experience of France since 1803, when silver was at one time the practical sole standard and gold yet remained in use (at a premium, and not at the legal ratio), is to the same effect. And similar experiences with inconvertible paper, alongside of which gold remains in use at a premium, have been frequent. Witness our own country at the beginning of the century; the United States during and after the Civil War, until specie payments were resumed; the Austro-Hungarian Empire for many years past; and the Argentine Republic at the present time. But silver, in the case supposed, must become the sole standard, and gold will go out of use as standard, though not out of use for purposes where it is not standard. The world will have a bimetallic law and a fixed ratio in law, but no bimetallic practice at the ratio.

The only question is what the premium on gold at first will be. If the legal ratio is fixed at anything like 15½ to 1, the premium must be considerable, and even at 20 to 1 there must still be a sensible premium. The reason is that the transition to bimetallism would involve

very little change in the supply and demand for gold and silver as compared with the supply and demand at present. The leading nations of the world, with the exception of England, have accumulated sufficient silver to go over to a silver standard without buying an ounce more than they have. The United States have locked up about £60,000,000 worth [now, 1892, over £80,000,000]. The Bank of France holds about £50,000,000. Germany has still a large quantity equally locked up. India, as we all know, has an immense quantity. The world, therefore, except England, can go over to a silver standard "at a flash," and has even silver to spare. As regards England again, all that is in question is the reserve in the Bank of England—£20,000,000 or so—which other countries could easily supply out of their immense stocks. No doubt England keeps more gold at present than the reserve in the Bank of England, but this gold, though equal to standard, is not used as standard. It is used as a superior sort of small change for which gold is absolutely necessary so long as there is no paper of lower denomination than £5. Unless something else is changed in England than the law of standard and unlimited legal tender, the transition to a silver standard would thus displace gold and create a new demand for silver to a very slight extent only. Nor would the supply of gold in any direction, in consequence of the change, materially increase. The leading nations of the world have no doubt plenty of gold which they could throw into the market if they wish. The United States

holds over £66,000,000; the Bank of France has £50,000,000; Germany, besides its military chest proper, has a large amount; Russia has nearly £40,000,000 [now, 1892, these figures would be somewhat larger, except for the United States, which has lost gold in the interval]. But will this gold or any of it be thrown into the market? It may well be doubted. At any rate, it will not come into the market in virtue of a bimetallic law. The causes which lead to hoarding now will prevail, and will even, I should imagine, increase in intensity. Will it be quite safe in England, for instance, if we go over to a silver standard and keep the bank reserve in silver, to do without a hoard of gold for an emergency such as other Governments possess? When the world becomes monometallic, therefore, on a silver basis, as the consequence of a universal bimetallic law, not only will gold in all probability retain its present relative value to silver, but it may rise in price. Circumstances may occur to change the price, such as the fertility of the Transvaal in gold; but such circumstances would change the price if they occurred now, and the bimetallic law would have nothing to do with it.

I need not point out that in this view, the transition to a silver standard would involve a great redistribution of wealth and other mischief. Because I am dwelling on the impossibility of a fixed ratio, and discussing coldly what in fact must happen, it is not to be supposed I forget altogether, though I do not discuss, the mischief involved.

When matters had settled down, what would the further effects be? Clearly so long as gold continued to rise in price in the market, or to remain above its value in the legal ratio, the bimetallic law would simply be inoperative. Silver would remain the sole standard, and gold would circulate at a varying premium.

But suppose the opposite event to happen, and that gold fell in price till it came in turn to be overrated in the ratio, and so displaced silver from the position of standard? This again might clearly happen without changing the relative demand for gold or silver very much, the transition from one standard to the other ocurring at a flash, just as the transition from gold to silver, as above explained, would now take place if a universal bimetallic law were introduced. Great inconveniences would be occasioned in the transition, and probably no nations would stand more than one transition, so that the bimetallic law would come to an end that way. But the quantities of gold and silver respectively in use need not change greatly on such transitions occurring. It is not the standard law, or the unlimited legal tender law, let it be well understood, which determines the employment of gold or silver respectively even in the money form, much less their total employment. Such laws as the *minimum* denomination of notes, or the regulations of token currency, are far more important in this respect, while the customs and habits of peoples, dictating the laws and regulations themselves, and leading them to the

use of different forms of money in different ways, are more important still. More important again are the non-monetary uses of the metals. The bimetallic ratio would thus have absolutely no effect, or very little effect, in preventing fluctuations between gold and silver. In the first case, where the metal not the standard tends to diverge further and further from the ratio, this is obvious enough; but even in the cases where the transition is from one metal to another as the standard and unlimited legal tender, the amount of employment for the precious metals respectively in proportion to their total employment is very little concerned. The price of gold and silver will thus go its own way whatever the bimetallic law may be.

On this head I must seek to modify a little an admission which I made in 1879 when I wrote 'The Case against Bimetallism.' * While pointing out then that the bimetallic law was practically inoperative in France from 1803 to 1873, because at one time silver was *de facto* the sole standard, and at another time gold, the other metal remaining in use only at a premium, I went on to admit that at the transition, about 1850, from silver to gold, the bimetallic arrangement tended to prevent a rise in silver and a fall in gold. France, giving up the silver standard, had silver to sell and gold to buy; and so to all appearance the tendency of silver to rise and gold to fall was mitigated. On reconsideration of the matter I am satisfied that even

* And still later when I wrote 'On Some Bimetallic Fallacies.' See *supra*, p. 22, and p. 55.

here the bimetallic arrangement did not do anything like the work it was supposed to do. France sold silver after 1850 and bought gold, but so far as I can judge the silver which was sold had not been in "circulation," and the gold which was bought did not for the most part go into "circulation." In about fifteen years after 1850 France sold about £50,000,000 of silver and bought £200,000,000 worth of gold, so that the exchange in any case was not more than £50,000,000, but the sale was from one hoard and the purchase was for the most part for another hoard. The same thing might have happened easily enough in a different form with France, a monometallic country by law, just as Germany took to gold in 1872 and the United States resumed specie payments on a gold basis in 1878. Theoretically, then, it is quite true that on a change from one standard to another under a bimetallic law the rise in the one metal and fall in the other would be checked *pro tanto* by any addition to the demand for the one which becomes the standard, and any increased supply of the other which ceases to be less in demand because it ceases to be the standard; but in practice this is not an important matter. The other demands for gold and silver at the time of transition may easily be such as to make it wholly insignificant. In no case, moreover, will fluctuations be prevented. The various demands will themselves change at the different ratios which will be established, and the supply will also change; and the substitution of one metal for another, which may take place at the transition, need not tend

to keep the market ratio steady at the legal ratio, but may do so at some other and totally different ratio.

Such are the fair prospects, I believe, if not merely international bimetallism among the leading nations, but a universal bimetallic law is introduced. If all initial difficulties are got over, there will be a universal silver standard at first, and the fluctuations of gold and silver will go on as before with very little change indeed in the conditions which settle the market price. This is the teaching of experience. The supply and demand for gold and silver are regulated to a very small extent by the law declaring a standard or unlimited legal tender. After such a law the ratio between the metals will continue to be settled pretty much as it was before—by the demand and supply of the metals for non-monetary uses; by the demand and supply for hoarding, whether in the coined or uncoined form, on which law has little or no effect; and by the demand and supply for various special uses of the metals as money with which the law declaring the standard and the law of unlimited legal tender have very little to do.

Probably a great deal of the confusion of thought among bimetallists which makes them ascribe so much virtue to legal tender is not improbably due to the vagueness of the phrases about coining the metals at a ratio, and making them legal tender at a ratio. Coining at a ratio, however, merely means that different weights of gold and silver respectively are divided into so many

gold and silver pieces, and then that 15½, 16, or 20 units of silver, as the case may be, are called by the same name as one unit of gold. They are "baptized" by the same names. But the weights and other qualities are what they were before. The gold and the silver remain commodities and nothing else, and subject exactly to the same laws of exchange as they were before coining. Making them legal tender at a ratio again only affects past debts at the moment the law passes; it controls no future bargain. It is a convenience, and by no means an indispensable convenience. It may have had more effect in past times than now, because Governments would pay, though they could not compel receipts, according to the law; but in these days, when the turnover of Governments is only an infinitesimal percentage of the turnover of the great commercial communities, even the effect of Government patronage by its own payments being according to law must be imperceptible. The legal ratio in theory, as we find is the case in practice, has thus no virtue to make the market ratio the same.

To use the words of Locke, who was not a mere amateur in this matter, but who was called in officially to settle the principles of the great recoinage of 1696 and other currency questions, and whose principles were finally incorporated with and made the foundation of the whole English monetary system, with the unanimous assent of English economists and English statesmen :— "There being no two things in nature whose proportion and use does not vary, it is impossible to set a standing

regular price between them. The growing plenty or scarcity of either in the market (whereby I mean the ordinary place where they are to be had in traffic), or the real use, or changing fashion of the place, bringing either of them more into demand than formerly, presently varies the respective value of any two things. You will as fruitlessly endeavour to keep two different things steadily at the same price one with another as to keep two things in an equilibrium when their varying weights depend on different causes."

There is much more in Locke, it need hardly be said, to the same effect, and the marvel is, perhaps, that any one should be found to dispute it. Still, even the so-called monometallists of the Royal Commission on Gold and Silver have been courageous enough to express an opinion in flagrant contradiction with Locke's well-known axiom, and it has thus become expedient, perhaps, to explain in detail in a special case the application of the principle on which the English monetary system has been founded, and on which every good monetary system must be founded. There cannot in practice be a dual standard and a dual unlimited legal tender "at a ratio," because there cannot be a fixed price between gold and silver—not even when all Governments pretend to fix the price.

The bearing of these observations on the question of discussing international bimetallism at all hardly requires statement. Business men and economists may be excused if they refuse to entertain, even for dis-

cussion, proposals which involve the possibility, not to speak of the certainty, of a money panic and universal bankruptcy, if they get only to the stage of Bills; which are likely to be upset in practice by individual action or social action, even if they are made into laws; and which, if they could be carried out at all, would lead in the first instance to something which nobody wants, viz., a single silver standard, with the chance of frequent changes of the standard afterwards, and, in any event, would not prevent those fluctuations between gold and silver that a fixed price is to get rid of. International bimetallism is dangerous enough even without these objections to it; but in the light of these objections we can only wonder more and more at its ever being entertained for discussion at all. In the country of Locke, of Adam Smith, of Lord Liverpool, of the Bullion Committee, of Ricardo, of Sir Robert Peel, it is surely a scandal of the first magnitude* that men of light and leading in other respects should have talked seriously, even if only for a moment, of any such idea as the possibility of a fixed price between gold and silver.

* A good deal of exception has been taken to this phrase by some of the members of the Royal Commission on Gold and Silver, who thought that it specially referred to them, as too strong. It is obvious, however, that in this passage there is no reference to the Royal Commission or its members, but the reference is to those of our public men generally who gave more encouragement than they should have done to currency agitators. Whether the phrase is too strong must be left to the judgment of the reader.

V.

M. DE LAVELEYE ON MINT PRICE.*

IMPERATIVE circumstances have prevented my giving attention to the numerous letters which have succeeded the communication I addressed to you a month ago on "The Inevitable Results of Universal Bimetallism." I propose now to make a few remarks on some of the principal features of the correspondence that interest me.

A main object of the original communication has been completely effected. That object was to protest against an apparently small, but really serious, concession to the enemy by the majority of the non-bimetallic section of the Royal Commission on Gold and Silver, to the effect that a fixed price between gold and silver might be maintained for a time by the union of the leading Governments of the world in fixing the price. The letters of "Scrutator" and others and your own comments have made it plain that this protest is an echo of the general opinion of monometallists and of the City, whose views were so inadequately represented on the Commission. The controversy with bimetallism

* Printed as a letter to *The Times* of January 31, 1890.

is accordingly restored to a proper footing. Either the English monetary system, which is based on the principle that there cannot and ought not to be a dual standard of money and a dual unlimited legal tender, because there cannot be a fixed price between any two things, is founded on what is untrue, or bimetallism is a mere delusion. There can be no compromise between the two systems, and on this footing the question must be argued.

It is not unusual, I believe, that a writer should find little to answer in his critics, but, having had to take the correspondence in a lump, as it were, I must say, at the risk of being commonplace, that I have been struck by the scantiness even of the references to the propositions put before your readers. There is much repetition of bimetallic formulæ and expression of the bimetallic faith; but as to how and in what way bimetallism can be introduced, and fluctuations between gold and silver prevented when all the world is bimetallic, having regard to the particular facts which were stated, there is hardly a syllable.

The original argument, however, was plain enough. 1. International bimetallism, it was urged, could not begin, because the attempt to introduce a bimetallic law in countries with an existing gold standard at any ratio likely to be agreeable to bimetallists would create a panic in England, seeing that there are millions of debts here which can be demanded at once, and the bimetallic proposal is to pay creditors who wait something materially less than they can ask now. Next, it

was stated that if this initial difficulty could be got over, commercial communities would probably contract themselves explicitly out of the bimetallic law, and that again would be the end of it. But if these early difficulties were got over, and somehow or other a *bonâ fide* attempt was made to work an international bimetallic law, then the effect would be, according to universal experience in past times, and in the present circumstances of the supply and demand for gold and silver respectively, to bring about at first a universal single standard of silver, gold remaining in use for the special uses, monetary and non-monetary, for which it would be required, but at a premium and not at the legal ratio, while for the future gold and silver would fluctuate like any other commodities. These propositions were supported by many facts in detail—for instance, by a statement of the large stocks of silver in the world at the present time, which would suffice for the establishment of a single silver standard without the purchase of a single ounce of that metal, so that an international bimetallic law could not raise the price of silver.

But when I review the correspondence what I find is not any reference to these propositions, but the most amusing irrelevancies. Mr. Foxwell occupies nearly three columns of your space mainly with a disquisition on the literary, economic, and statistical merits and demerits of Mr. Giffen. The Duke of Marlborough, whose letter I have already noticed,* gives up international bimetallism, and puts forward the type of that

* See *postea*, p. 155.

folly which we now find in the United States. Mr. Herbert Gibbs asks for an explanation of the French experience from 1803 to 1873, under the impression, apparently, that France had bimetallic practice as well as a bimetallic law during that period. Sir Henry Meysey-Thompson calls for statistics of the relative magnitude of the different classes of payments. M. Alphonse Allard states that Mr. Levin, of Cambridge, who answered Mr. Foxwell on one point, is a friend of mine (which happens not to be true, as I have not the honour of even the acquaintance of Mr. Levin); that he (M. Allard) is one of the bimetallists who are alleged to be lunatics; and so on. Mr. Samuel Montagu describes a class of bullion operations which he thinks will probably be carried out if a general bimetallic ratio is introduced. Last of all, I notice M. de Laveleye, who has written, not once but twice, and who tells us that there was both gold and silver money in France when it was bimetallic (as there has always been in England and is now, although England is monometallic); that the Mint price for gold is £3 17*s.* 10½*d.* per ounce; and that I had said bimetallism would not act because gold, being at a premium, would be hoarded, which he proceeds accordingly to argue against, the fact being, of course, that I had never said anything of the kind. All this and more to the same effect may be more or less interesting, but obviously it does not touch on the issues originally raised. That it is difficult to keep bimetallists to definite points is no new experience, and I certainly do not complain of it.

That they cease to argue when one comes to close quarters and definite issues are raised, and go off into rhapsodical confessions of bimetallic faith instead, is precisely one of the characteristics of the currency faddist.

In all this there is lesson enough for some of our half-hearted, non-bimetallic friends represented on the Gold and Silver Commission, who have bemused themselves into the notion that there may be international bimetallism for a time, and so on. They may see for themselves what sort of allies they have been countenancing. But M. de Laveleye's letters have a special value in this connection. Some of our English bimetallists, Mr. Foxwell, for example, labour most strenuously to give a decent colour to their views, and to tone down the extravagance of the true bimetallist. Mr. Foxwell tells us that bimetallists do not want particularly to raise the price of silver in relation to gold, and he specially avoids affirming that Governments can fix any ratio between gold and silver they please. But M. de Laveleye, like M. Cernuschi, has the courage of his convictions. What he aims at is the old 15½ to 1, which is, indeed, the object of all the bimetallism that has any steam in it, and, indeed, must be the object so long as France and other countries which are to come into the system possess immense quantities of silver coined at that ratio.

I do not think I need answer M. de Laveleye on this head, as he has been more than once answered already; but it is so interesting to have an exhibition of what

bimetallism really is, that I may be excused for forcing on the notice of our English bimetallists, and on the so-called monometallists who have been disposed to admit the possibility of bimetallism for a time, the nature of the alliance into which they have entered.

M. de Laveleye's idea first of all is that the impression of a metal with certain stamps by the Mint is the fixing of a price for it. If you take an ounce of gold to the Mint, he says, it is coined into £3 17*s.* 10½*d.*, and that is the price of an ounce of gold. This is as much as to say that if you send a cask of beer to the bottler and he fills 100 bottles with the contents, the 100 bottles is the price of the cask of beer. Of course, the gold and the beer before and after coining and bottling respectively are the same, and the £3 17*s.* 10½*d.* is an ounce of gold and not the price of it, just as the contents of 100 bottles are the beer that was in the cask and not the price of it. I need hardly add that this talk of a Mint price is the old and time-worn talk of the currency faddists who believe in inconvertible paper.

M. de Laveleye's next step is to argue that if Governments make the Mint price of gold £3 17*s.* 10½*d.* per oz., and the Mint price of silver 60⅞*d.* per oz., you have the ratio of 15½ to 1 at once. That is to say, if you stamp a certain weight of gold with the name £3 17*s.* 10½*d.* and 15½ times the weight of silver with the same name, you make the two things the same, and they will exchange at that ratio. To continue the analogy of the beer, if you called the 100 bottles of beer an alcoholic *juste*, and five bottles of whiskey also an

alcoholic *juste*, to use M. Cernuschi's phrase, the 100 bottles of beer and the five bottles of whiskey would pass as the same thing, and beer and whiskey would exchange for one another in the proportion of 20 to 1.

Our English bimetallists have refined theories to prove from the nature of money and so on that that may happen with gold and silver when they are money (within certain limits which they never define) which will not happen with other things, or even with gold and silver *qua* commodities only; but M. de Laveleye troubles himself with no theories, and imposes no limits. He puts forward the baptism of the Government as all-sufficient, and so do all true bimetallists at heart. Their doctrine is, in fact, the doctrine of the advocates of inconvertible paper, only the latter are more logical. If Government is to fix prices at all, it is, of course, cheapest and easiest to go to inconvertible paper at once.

M. de Laveleye, therefore, has done a great service to monometallism here by exposing the wildness and absurdity of the monetary theories with which our English bimetallists have been allied. M. Cernuschi on former occasions has rendered the same service. The more they dwell on the Mint price of gold and similar fads, the more impossible do they make any form of bimetallism in England.

VI.

THE ALLEGED BIMETALLISM OF FRANCE, 1803–1873.*

It was to be expected that on a renewal of dispute as to whether there can be a fixed price between gold and silver, the advocates of a double standard would again cite the French experience of 1803–1873 as proving the affirmative. This has always been a trump card with them, and as usual it has been played. In point of fact France was not bimetallic almost the whole of the period and the bimetallic law was completely inoperative, while the comparative steadiness of the price between gold and silver for such a period, considering what the history of gold and silver has been, gives no cause for surprise. But as the facts have been so steadily misrepresented for many years, I trust to be excused for now going a little into detail.

I am induced to do this all the more because of the remarkable aberration of the Gold and Silver Commission on the subject—in this case the two sections combined, bimetallic and non-bimetallic. They affirm that the French legal ratio did tend to keep the market ratio

* Printed as a letter to *The Times*, February 1, 1890.

the same. The view, they say, that this ratio could only affect the market price of silver "to the extent to which there was a demand for it for currency purposes in the Latin Union, or to which it was taken to the mints of those countries, is, we think, fallacious. The fact that the owner of the silver could in the last resort take it to those mints and have it converted into coin which would purchase commodities at the ratio of $15\frac{1}{2}$ of silver to 1 of gold, would, in our opinion, be likely to affect the price of silver in the market generally, whoever the purchaser and for whatever the country it was destined. It would enable the seller to stand out for a price approximating to the legal ratio and would tend to keep the market steady at about that point."

How one or two of the genuine monometallists on the Commission came to pass these sentences is a matter for no small wonder, infected as they are unquestionably with the notion that a mint makes a price, which is the basis of the absurdities of inconvertible paper. But the opinion is there, and the attention which no one would give to inconvertible paper faddists must perhaps be given to their views when indorsed, however accidentally, by Royal Commissioners.

Apart, then, from all question of the theoretical reasons for a legal ratio between gold and silver affecting the market ratio, there is certainly nothing in what happened in France between 1803 and 1873 even to suggest that the former caused the latter to be the same as itself actually or approximately.

In point of fact, there was not generally during the whole of this period such an approximation as would suffice for a double standard and a double unlimited legal tender in practice, as distinguished from a law to that effect. In 1886, in a paper read at the Bankers' Institute,* I published the figures of the actual premium on gold in Paris on the 1st of each month for the years 1820–1847—the greater portion of the period—which placed the fact beyond doubt that gold and silver did not pass in all that time at the ratio, but that gold varied in price usually between ½ per cent. and 2 per cent. premium, with not very frequent and not very lengthened lapses below the ½ per cent., and not one date being mentioned on which there was not a premium of some sort. These premiums were quite sufficient to make the practice different from the law. At anything over even ¼ per cent. premium for gold,† no man alive would pay a debt in gold which he could pay in silver without a premium, and consequently the demand for gold for standard and for unlimited legal tender in France was all this time in suspense. When the premium was between 1 and 2 per cent. it was very serious indeed. Clearly not even for the smallest payment would any man pay in the proportion of £102 for every £100 of debt.

When I wrote the paper for the Bankers' Institute in 1886 I had no figures for the period from 1803 to 1820 before me; but I may now refer to the ratios of Soetbeer, as quoted in the last Report of the Director

* See *supra*, p. 39. † Or even $\frac{1}{100}$th of 1 per cent.

of the United States Mint (p. 162), which gives the following average ratios of silver to gold from 1803 to 1820, inclusive, viz. :—

1803	..	..	15·41	1812	..	..	16·11
1804	..	..	15·41	1813	..	..	16·25
1805	..	..	15·79	1814	..	..	15·04
1806	..	..	15·52	1815	..	..	15·26
1807	..	..	15·43	1816	..	..	15·28
1808	..	..	16·08	1817	..	..	15·11
1809	..	..	15·96	1818	..	..	15·35
1810	..	..	15·77	1819	..	..	15·33
1811	..	..	15·53	1820	..	..	15·62

The averages of course imply that there were still greater extremes of variation; but apart from this it may suffice to note that in half the years from 1803 to 1820 gold was at a premium compared with the legal ratio in France—in three of the years on the average over 3 per cent. premium.* No doubt in other years the premium was on silver, though not to so great a degree as the premiums stated on gold; but generally France was a silver standard country before 1820, with gold at a considerable premium, just as it was a silver standard country from 1820 to 1847. The market ratio was seriously different from the legal rates to an extent that made the bimetallic law absolutely inoperative.

After 1847 the Australian and Californian gold discoveries began to take effect,† when silver in turn went

* A half on 15½ is almost exactly 3 on 100, and in three of the years silver had fallen to a ratio of less than 16 to 1.

† I understand now that the premium rose at one time during the revolution of 1848 to 5 per cent. This of course would strengthen my argument.

steadily to a premium down to the year 1867, the ratios given by Soetbeer from 1847 to 1867 being as follows :—

1848	..	..	15·85	1858	..	..	15·38
1849	..	..	15·78	1859	..	..	15·19
1850	..	..	15·70	1860	..	..	15·29
1851	..	..	15·46	1861	..	..	15·50
1852	..	..	15·59	1862	..	..	15·35
1853	..	..	15·33	1863	..	..	15·37
1854	..	..	15·33	1864	..	..	15·37
1855	..	..	15·38	1865	..	..	15·44
1856	..	..	15·38	1866	..	..	15·43
1857	..	..	15·27	1867	..	..	15·57

Thus from about 1851 to 1866 inclusive, excepting one year only (1852), France was steadily a gold standard country as it had been a silver standard country—the premium on silver not rising apparently to so high a point as the premium on gold had risen, though on this point the figures are not so good as from 1820 to 1847 as they are not the quotations from Paris itself. Still the premium on silver in a good many years, when the average ratio of silver to gold had risen to such figures as 15·29, 15·27, and 15·19, was as high as $1\frac{1}{2}$ per cent.

With 1867 the great change began, which culminated in France in 1874 being confronted with the alternative of suspending the free coinage of silver or going over to a silver standard, the transition being virtually effected in six years, and the premium on gold having already risen to 3 per cent. and upwards before the Governments of the Latin Union acted. France in 1867 had already become in fact a silver standard country, ceasing to attract gold as standard money and unlimited legal tender from that date.

And always, or almost always, from 1803 to 1873, the market ratio differed so seriously from the legal ratio that the two could not be said to approximate in any proper sense of the word. Between two such articles as gold and silver, which are remarkably steady often over considerable periods without a bimetallic tie, a difference of 1 or 2 per cent. is as fatal to their passing as equivalents as a difference of 10 or 20 per cent.

But, assuming for the moment that what happened may be described as an approximation of the market to the legal ratio, how can the legal ratio be said to be the cause of the market ratio approximating? Theoretical reasons are given by bimetallists, but they are evidently impressed by the coincidence, like the Gold and Silver Commissioners, and the logic of this impression seems well worth examination.

In scientific studies, when one thing is alleged to be the cause of another, a single coincidence by itself does not go for much. If a certain artificial manure is alleged to produce good crops, the application of the manure for a single season and the fact of a good crop following would not go for much, I imagine, with Messrs. Lawes and Gilbert. They would desire to know what happened to other crops on the same sort of soil under similar conditions with and without the manure, and they would compare results for a series of years. Unfortunately, we cannot make experiments in economics; but even here one observation does not count, and the method of difference must be applied where more than

one actual observation can be made. We must make the best of the few that can be had.

We find, to begin with, then, that there is one remarkable experience of bimetallic ties in which unquestionably there were variations in the ratio of gold and silver, in a period about the same as 1803–73, amounting to more than 25 per cent. Dr. Soetbeer gives the following ratios of silver to gold :—

Year.	Ratio.
1581–1600	11·80 to 1
1601–1620	12·25 to 1
1621–1640	14·00 to 1
1641–1660	14·50 to 1
1661–1680	15·00 to 1

The change in eighty years is no less than 27 per cent., and in the sixty years ending 1660 it was no less than about 23 per cent. The mere coincidence of a legal ratio with a market ratio approximating thus proves nothing by itself as to the one being the cause of the other. The experience of 1803–73 is more than set off by the experience of the first half of the seventeenth century.

It has to be considered, moreover, that we could only learn with difficulty the details of the latter period. We may assume, however, that when the average changes are so great the extremes of oscillation must have been greater still.

I have seen it urged by bimetallists that there was no proper bimetallism before 1803, so that the experi-

ence of the first half of the seventeenth century does not apply. This is not the case. The ties were as binding and well constructed for centuries before 1803 as they were in the French experience. But admitting this contention, we are then confronted by the fact that the ratio of silver and gold was about as steady last century as from 1803 to 1873, although all that time, assuming this contention of the bimetallists, there was no proper bimetallic tie. If, on the other hand, the ties were as firm before 1803 as they have been since, the proof is conclusive, from the experience of the seventeenth century, that the bimetallic tie does not keep the market ratio from fluctuating.

Unfortunately, there has not been much experience of periods in which bimetallists would consistently admit that bimetallic ties did not exist; but even since 1874, notwithstanding the fact that the period has been obviously transitional, with catastrophic changes occurring in the supply and demand for the precious metals, there have been lengthened periods of stability in the ratio between the two metals. At this moment [January 1890] the fluctuations for several years in the gold price of silver have been between 42*d.* and 45*d.* per ounce, a range of about 7 per cent. only, and no greater a range of variation than what happened on one or two occasions in France between 1803 and 1873 in similar periods. Between 1813 and 1814, in fact, according to the above table, there was a fluctuation from an average ratio of 16·25 to 1 to an average of

15·04 to 1, or $7\frac{1}{2}$ per cent. In another year, where the averages do not change so much—viz., 1819–20, Lord Ashburton, who was a pioneer of bimetallists, notices that "silver which ranged at the price of 62*d.* during the greater part of 1819 fell down as low as 58*d.* in 1820 the next year, so that there was then about 6 or 7 per cent. difference between the one and the other." * The recent steadiness of gold and silver over a considerable period, when there has been confessedly no bimetallic tie, is quite as great then as we often find when there is a bimetallic tie.

Surely, then, it may be observed, if gold and silver under ordinary market conditions can remain comparatively steady for so long, there is nothing so very wonderful, requiring a miracle to account for it, in one remarkably lengthened period of seventy years, which is all that the French experience amounts to, admitting that there was any real approximation at all between legal and market ratios in that period.

We may go a little further. Admitting that there is a kind of surprising phenomenon to be explained, we are confronted by the fact that the suggested explanation of a Government fixing a price being the cause of a market price approximating is condemned by universal experience as to every other commodity and thing that can be priced except gold and silver. Governments in past times, when the habit of fixing

* Select Committee on Agricultural Distress, 1836. Part II. Q. 17,707.

prices for gold and silver commenced, fixed prices for other things as well—for commodities, for the loan of money, for the wages of labour. But the prices all broke down. The market went its own way, and in time all Governments abandoned the foolish practice. The presumption is certainly against the idea that the fact of the French Government having fixed a price between gold and silver in 1803–73 was the cause of the steadiness for gold and silver in that period.

The only thing, then, bimetallists can take stand on is the likelihood of the process by which, as they describe it, the legal ratio tends to make the market ratio approximate. What they say is that gold and silver can both be used to pay debts with at the ratio. But clearly no man in his senses will pay a debt of £100 with the equivalent of £102, which would be the case if he paid with the metal at a premium, so that in all cases where there is a bimetallic law, and people do not contract out of it, the standard and unlimited legal tender is exclusively the metal that is overrated in the legal ratio as compared with its market price, and there is no demand for that metal as standard except what would exist in a monometallic country with the same standard. In all the long period from 1803 to 1847, when France had practically a silver standard, it sustained the price of silver no more and in no other way than England with its single gold standard sustained the price of gold. The suggestion in the above-quoted passage of the Gold and Silver

Commission that coining at a ratio had some mysterious virtue in keeping silver to the ratio is worthy of M. de Laveleye's doctrine about mint price. No reasonable process accordingly is suggested why a legal ratio should have any effect in making the market ratio approximate. And as the bimetallic tie certainly does not always make the market ratio conform, witness the period 1600-60, as gold and silver are apt from natural laws to be steady for considerable periods, and as Governments have not succeeded in fixing prices for anything else, we are most certainly entitled to dismiss the French experience of 1803–73 as proving in any degree that Governments can exceptionally fix a price for gold and silver, though they can do so for nothing else.

Much stress is laid in the Commission's report, as justifying their view of the steadiness between gold and silver in 1803–73 as something remarkable, on the fact that the steadiness existed notwithstanding great changes in the relative amounts of the two metals produced. The persistence of error is remarkable. There is, of course, no connection between the relative quantities of two metals and their price, and equally we may assume between changes in those quantities and changes in their relative price. Adam Smith has so clearly disposed of this blunder about the quantities of gold and silver in his essay on the "Variations in the proportion between the respective values of gold and silver," that one would hardly have expected it to revive in a slightly changed form in these latter days.

In all cases of price demand as well as supply must be considered, and supply and demand may keep level although supply by itself may change.

It would not be difficult to show in fact what the growth of the demand for gold was about 1850 when the supply increased so enormously relatively to silver, and how little the alleged compensatory action of bimetallism in bimetallic countries affected it. The Australian and Californian gold in the quarter of a century intervening between the discoveries and the rupture of the bimetallic tie was absorbed in fact for the most part by monometallic gold countries, and by a monometallic silver country, India, while the absorption in France, which was supposed to have counted for so much in steadying the price, though it was no doubt large, was not for the purpose of replacing silver in circulation, but in a way and for purposes independent of the French standard law. But at present I can only call attention to the facts in passing. The suggestion that there was anything singular in gold and silver remaining steady, though their relative supply changed, is entirely without foundation.

The only time on ordinary principles when a bimetallic law in France could have operated to keep gold and silver steady was at the transition period 1847–50, and again at the transition period after 1867. At these dates the change of standard or threatened change of standard might have operated to increase the supply of the metal ceasing to be standard and increase the

demand for the cheaper metal. But as I showed in my former letter, the variation in supply and demand through a transition occurring need not be very great, or such as to prevent the transition itself. Two or three years only sufficed to make the change in France about 1850, and the change which commenced in 1867 had been effectively made in 1874, when France suspended the coinage of silver so as to recover the gold standard it had really lost.

The fall of silver after 1874 is also dwelt upon by bimetallists as proving how much the bimetallic tie *must* have done before that. As in point of fact the bimetallic tie could and did nothing to prevent fluctuations between gold and silver, this "must" is no very effective argument. In point of fact, however, as already indicated (but it is as well the point should be emphasised), the bimetallic tie in 1874 was ruptured because the fall of silver, actual and apprehended, made it impossible to maintain it, and it was not the rupture of that tie which caused the fall of silver. This is a matter of history, and not very ancient history, though it is curious to see how the Gold and Silver Commission overlooked what was staring them in the face. By the end of 1873 the ratio of silver to gold was already all but 16 to 1, and a further fall was universally expected at the time. There was the greatest apprehension among French economists and public men at the inevitable approach of a single silver standard. France also was already overwhelmed with an avalanche of

silver. I was in a position to hear something of the matter at the time, and I recollect well hearing reports of deposits of silver at the French mints sufficient for twelve or eighteen months' coinage. On inquiring lately I find these reports confirmed and the deposits spoken of as even larger. France, in fact, in 1874 had already got all the silver necessary for the silver standard, and the bimetallic tie was gone in practice before the Government abolished it in law. That the demand for silver would have been much the same since 1874 if France had gone over to a single silver standard is, of course, a matter for speculation. But if there had been a greater demand than what there has been, it would not have been in consequence of the bimetallic law. It would have been the will and pleasure of the French people and Government making an effective demand for silver in other ways; and in no case would fluctuations between gold and silver have been prevented.*

In all ways, then, the French experience of 1803–73, which is spoken of as so novel, gives no countenance to

* Mr. Hucks-Gibbs published in the *Economic Journal* of last year (first number) an essay on the Course of Events in 1873–74, in which he makes an endeavour to refute these statements on the authority of the Director of the French mint. I confess that having done my best I do not follow Mr. Gibbs's arguments. But the Director of the Mint to whom Mr. Gibbs appealed, and whose letters he prints, quite confirms my view of the events. M. Sudre states:—

"Évidemment les restrictions apportées en France à la fabrication de l'argent ont pu participer à la dépreciation de ce métal, mais pour moi ce fait n'a eu qu'une importance secondaire, puisque

the view that Governments can fix a price for gold and silver, and that consequently there can be a double standard of gold and silver and a double unlimited legal tender. On the contrary, the fluctuations of price in the period were so great as to compel France at one time to have a single standard of silver and then a single standard of gold, and finally to rupture the bimetallic tie, because it had commenced to receive an avalanche of depreciated silver which was likely to depreciate still further compared with gold. This is exactly in accordance with the *dicta* of the older economists, who affirmed the impossibility of a fixed price between gold and silver and the impossibility consequently, of a double standard. The suggestion that, if Locke and Ricardo had lived, they would have been convinced by the French experience is accordingly most wide of the mark. They could only have pointed to the French experience as a conclusive example of the truth of what they had preached, and the necessity for building on the foundation of a single standard and a single unlimited legal tender if you want to have good money.

This letter is already very long, but the facts have been so steadily obscured, that I must add a word on another point. Why was there so much gold in France at one time, when silver was its predominant money

déjà avant les restrictions, en 1873, le prix de l'argent était en baisse. La démonétisation allemande et la découverte des mines d'argent aux États Unis, ont été les causes principales des faits qui se sont produits depuis 1872."

under the bimetallic law? The point is not very material, because gold was steadily at a premium, showing that the metal which is not the standard may remain in use for the special monetary purposes for which it happens to be required at a premium, and that it does not go wholly out of use, if not used at the ratio, as bimetallists seem to suppose; but it enables me to refer to an interesting fact which ought not to be lost sight of—viz., the great importance of subsidiary monetary laws and customs and not the law of standard and unlimited legal tender, on which bimetallists fix their attention, in making the demand for the precious metals. For a long time, then, in France gold was wanted for special purposes more than it would otherwise have been, because there was no denomination of paper under £20. I have only recently become acquainted with this fact myself, but it is obviously material. If you have no paper of less denomination than £20, gold only can do the work of these payments which lie between the limit of £20 and the *maximum* amount, whatever it is, which it is convenient to pay in silver. Much of the gold coinage, also, which was at one time full valued, would become degraded by wear and tear, and would accordingly circulate as a kind of small change, saved from the melting-pot by loss of weight. The presence of some gold in France, when silver was the practical standard, is thus very easily accounted for without ascribing it in any way to the bimetallic ratio. There are always natural demands for both gold and silver independent of such a law.

VII.

UNSALEABLE SILVER.*

I HAVE to thank the Duke of Marlborough and your other correspondents for calling attention to my article on "A Money Problem" in the *Nineteenth Century* for November last, in connection with my letter to you last week on "The Inevitable Results of International Bimetallism." With all respect to them, I submit that the two papers are not the same, though they deal with different aspects of the bimetallic heresy. Because people will find a great deal in the paper on "A Money Problem" showing the unanimity of economic opinion as to gold and silver being commodities and subject to the same laws of exchange as other commodities, as to the unanimity with which a single money standard has been adopted in this country because a dual standard is impossible, and as to the accidental and blundering origin of the bimetallic idea itself—topics which were not quite the same as those of my letter to you last week—I am extremely obliged to your correspondents for calling attention to that paper. Whether I have demonstrated the main point of my letter to you—viz.,

* Printed as a letter to the *Times*, Jan. 4, 1890.

that a fixed price between gold and silver is impossible by means of a bimetallic law for coining the two metals at a ratio, and making them unlimited legal tender at that ratio, even when all Governments pretend to fix the price, the reader must of course judge for himself. On this head, I am happy to notice, there is nothing in any correspondence or criticism I have seen that calls for response at all.

I write now because the Duke of Marlborough opens up another topic which, in any case, has been suggested to me as the subject of a paper. He points to the American monetary system, of all things in the world, as an example for our imitation. He does not advocate pure bimetallism, but something else, and this something else the American monetary system. So far from the American monetary system being an example for imitation, it is really an "awful example" of the dangers and inconveniences of bimetallic ideas in practice. France is an example of the same sort, and there are no doubt others; but France and the United States are conspicuous cases, and I propose to take them together.

The working of bimetallic ideas in those two countries has been that they have both accumulated a large stock of silver which is absolutely useless and superfluous, which they could not get rid of except at a great loss of capital, and which, in the meantime, constitutes at best a large investment in a security which bears no interest.

In France this stock of silver is about £50,000,000. In the days when it was bimetallic by law, France was

at one time in practice a monometallic silver country and coined silver largely. This silver was, and is, unlimited legal tender. In the few years before it was compelled to rupture the bimetallic tie, in consequence of the fall in silver which the bimetallic tie could not prevent, and the imminent danger of silver again becoming the standard in place of gold, another large amount of silver was coined. This silver is also unlimited legal tender, and from the two sources together a large sum, now amounting to £50,000,000 or more, has accumulated in the Bank of France. France maintains the gold standard, or nearly maintains it, having for that purpose an amply sufficient stock of gold in the Bank of France—viz., about £50,000,000—and the danger of a silver standard being prevented by the absolute suspension of the free coinage of unlimited legal tender silver; but the silver which has been coined remains, and there is absolutely no use for it.

The United States, again, has a stock of nearly £70,000,000 of silver [now, 1892, more than £80,000,000], which has accumulated in a somewhat different way, but which is equally useless and superfluous. The origin of this stock is the well-known Bland Act, which was passed in consequence of the pressure of the silver party in the United States. By this Act the Government of the United States must coin not less than two and not more than four million dollars' worth of silver monthly, at the ratio of 16 to 1 of gold, these dollars being also declared to be unlimited legal tender; and, as this coinage has been going on for eleven or twelve

years, it comes about that the United States, like France, has an immense stock of unlimited legal tender silver accumulated. [And see next paper, "The American Silver Bubble," for an account of the similar Act of 1890.] But the United States, like France, still maintains the gold standard; it has a far more than sufficient reserve in gold for the purpose (over £60,000,000 in the United States Treasury*), and, as yet, at least, though the coinage of unlimited legal tender silver is not suspended, as it is in France, but goes on, still this is monopoly coinage and not free coinage, and practically the coins are convertible by the arrangements of the Government into gold at will. The silver, however, like the silver in France, is absolutely useless and superfluous for any monetary purpose. It is not really used, and cannot be used, so long as the United States maintains the gold standard.

It will be urged, perhaps, that there is a larger paper circulation in both France and the United States than would otherwise be possible, because of the silver. In the United States, even, a portion of the paper issues—viz., the silver certificates—is nominally based on silver. But the least consideration will show that the gold in both France and the United States is amply sufficient both to protect the paper issues and to maintain the cash reserve of the banking system, and that the silver is a fifth wheel to the coach. There are two things required for all paper issues, as well as for any system of credit—viz., (1) the solvency of the issuer or

* Now, 1892, somewhat reduced.

debtor, as the case may be, the security that the paper or debts will be ultimately paid; and (2) the convertibility of the paper, or cheques and bills, as the case may be, into cash of the standard money in which they are expressed on demand. Now, as regards the first head, the solvency of the debtor, in the case of the paper issues of Governments, like those of France and the United States, there can be no doubt, the resources of those Governments being enormous as compared with their liabilities, while as regards the second head—viz., convertibility on demand—the gold they have is far more than ample. £50,000,000 in France and over £60,000,000 in the United States secure convertibility on demand absolutely, and nothing more is necessary. If more is thought to be required, it must be for other reasons. The silver, at the same time, does not count, except infinitesimally, as a part of the general resources of the two countries. Having relation, therefore, to the ultimate solvency of the paper, the silver is immaterial, while as regards convertibility on demand, it is irrelevant. The respective Governments might just as well keep copper, or tin, or pig-iron, or wheat, or any other valuable commodity which is not the standard money of the country.

Two inconveniences arise to the Governments concerned from this unusable silver. The first is the capital loss apparent on the assets in the common markets of the world. The so-called £50,000,000 of silver which the Bank of France possesses is only worth about £35,000,000 at the present market price of silver.

France has locked up about £50,000,000 of its means in a security which is not only not interest-bearing, and for which it has no use, but which, if realised, would entail a capital loss of £15,000,000. The United States, again, with nearly £70,000,000 nominal of silver, has in reality only about £50,000,000 worth. The case of the United States is not so bad as that of France, because the silver was bought largely at prices not much above those now ruling, and some even at a less price; but the Government of the United States would undoubtedly sustain heavy loss on realising. It has, in fact, invested enormously in a bad and wholly useless security, which bears no interest, and on which it suffers the loss of interest while the investment continues, with the prospect of eventual loss of capital if the security should ever be realised.

The second inconvenience which these Governments sustain is the danger to the maintenance of their standard for money itself. In the case of France, as yet, this does not seem to be more than an inconvenience. The coinage of unlimited legal tender silver is stopped for good, and the evil does not increase. But France has not an absolutely automatic gold money. The Bank of France would like to pay in the unusable silver if it could, and charges a small premium on gold when it is required. This is a defect in the French system and keeps it from the perfection of a gold standard. The situation in the United States, however, is undoubtedly serious. The stock of silver, which is absolutely unusable while a gold standard is main-

tained, increases year by year: there are projects for increasing the stock and "basing" more paper on it, as well as projects for thorough bimetallism; there is serious danger, undoubtedly, of the United States passing over to a silver standard so long as this stock exists and accumulates and there is so much paper technically "based" on it. So long as the United States refuses the free coinage of silver, the gold standard may be maintained, but there is at least alarm in many quarters in the United States, at the possible consequences of that departure from the simplicity of a single gold standard which was initiated at the very moment of resuming specie payments, and by which nothing has yet been done to make money more abundant in the United States, or, indeed, to effect anything else, except to accumulate a large stock of unused silver, with the added risk of transition to a single silver standard at any moment.

That there are other inconveniences, not only to France and the United States, but to the world in general, goes without speaking. Just as there were large interests disturbed and threatened by the recent copper syndicate, so everybody who would use silver, or who must use silver, is inconvenienced by the artificial market which the United States especially has created. Much silver may have been produced, which ought not to have been produced, owing to the artificial price obtainable for it; on the other side, natural demands which might have arisen at a natural price have very probably been prevented; and there is an enormous

stock hanging over the markets at all times, without any guarantee that some large portion of it may not be forced for sale at any time. These are not light inconveniences, which the world has to endure as the consequence of the practice of bimetallic ideas.

If anything more were needed, therefore, in addition to what has yet been urged, to induce any nation to beware of any dealings with bimetallism, it would be the experience of France and the United States. These countries have nothing to boast of in their monetary arrangements, as far as the standard is concerned, but very much the reverse. There are defects in our own system, no doubt, but, at least, a cheque on London is payable in gold, and no mistake about it; and our Government has not been so foolish as to suffer the loss of interest on £50,000,000 or £60,000,000, locked up in a security which meanwhile bears no interest and serves no useful purpose whatsoever, and on which there would be an immense loss if it were to be realised, with the risk added that the standard for our money itself would be at all times endangered.

VIII.

THE AMERICAN SILVER BUBBLE.*

The late Mr. Bagehot used to remark that the United States was a country for exemplifying by experiments on a large scale the old truths of political economy. The people were indifferent to experience gained elsewhere, while they were protected from the most serious consequences of mistakes, that would be supremely disastrous in old countries, by their magnificent resources. They were thus constantly renewing old experiments under favourable conditions and confirming, if not adding to, our knowledge of the principles of political economy. The latest experiment of this kind is the silver legislation, of which we have all heard so much during the last few months. Of all things in the world, "money," which can least bear tampering with, or anything but scientific treatment, is being made in America the bone of party contention, under the influence partly of a mining interest which desires strongly to get a better price for silver, and partly of a soft money interest, which desires to have abundant money of some kind if it cannot have incon-

* Originally published in the *Nineteenth Century*, August 1890.

vertible paper. The resulting legislation, which has in fact been accomplished, is certainly of a singular character, and raises questions of immediate practical as well as scientific interest, not only to Americans but to other peoples as well. Some account of the matter, then—of the fantastic ideas which influence the event, of the results which must ensue as distinguished from those hoped for and predicted, and of the consequences to wider interests—may thus be of some use. The facts are highly complex and little known and understood even in America. Two articles which have lately appeared in the *American Quarterly Journal of Economics,* one by Mr. Taussig and the other by Mr. Horace White,* throw a good deal of light upon the matter, and I should like, therefore, to refer to these articles at starting, so that those interested may follow up the subject, although the point of view from which I now write is different from that of both authors referred to, and my own information is mainly derived from independent study of American official reports and publications.

It appears necessary at the beginning to give some account of the American monetary system, which is highly complex and difficult, bearing traces of the system of inconvertible paper which only came to an end twelve years ago, and of the conflict of ideas

* *Quarterly Journal of Economics*, April and July, 1890. London, Macmillan & Co. Mr. Taussig's article, with additions, has since been reprinted under the title of 'The American Silver Situation.'

between the hard and soft money schools which has prevented the establishment and consolidation of a consistent and harmonious system.

The first point, then, is that the standard monetary substance of the United States is still practically gold. The unit is a dollar, consisting of $25\frac{8}{10}$ grains of standard gold. The intention in 1873, when a bimetallic standard was formally abandoned, was to have a complete monometallic system, with a gold standard, like England; and although this intention has been partly nullified by legislation of a different kind in 1878, on resuming specie payments, and since, at the instigation of the abundant money party, yet gold in fact retains its pre-eminence in the United States system. It is still the only metal there which individuals can take to the Mint to be coined. All the other coinages or currencies—so-called legal tender silver coins and paper money of different descriptions, as well as fractional silver and copper—are substitutionary and representative of the standard substance only, and are kept up to the gold standard by the various monometallic devices for such currency—viz. limited coinage or issue; receivability at the Government Treasury for taxes and dues as the equivalent of gold; and, in some cases, limitation of the legal tender privilege.

The actual amount of the standard monetary substance in use is not material, as the United States, like any other country with a metallic standard automatically working, can draw, if need be, upon the standard substance wherever it can be obtained; but it may be

noted that the United States has, in fact, a very sufficient stock of the standard metal. According to the report of Mr. Leech, the Director of the Mint in the United States, on the production of gold and silver in 1889, the visible stock of gold in the United States on the 1st of January last [1890]—that is, the stock in the Treasury and in the banks, and not including anything that might be in private hands—was £84,000,000.* This is ample and more than ample. The corresponding sum in the United Kingdom is probably under £40,000,000, the reserve of the Bank of England being £20,000,000 only. We have a considerable sum in addition in private hands used as small change which the United States dispenses with; but the actual and visible stock available for the support of large transactions is smaller here than there. It is estimated that there may be £50,000,000 more gold in the United States which cannot be visibly accounted for, that being the excess over visible stocks shown by a calculation from the annual production and the excess of imports over exports since specie payments were resumed, less the estimated amount used in the arts, but this sum of £50,000,000 is not visible, and the calculation only illustrates the uncertainty of most calculations as to the amount of the precious metals in existence or use. However, the amount visible in the United States is more than sufficient for all purposes of security. Contracts to deliver the standard substance can with certainty be fulfilled, if required, and the

* The exact amount stated is $419,578,362. See Report, p. 55.

substitutionary or representative currency is adequately backed.

We come, then, to the question of the substitutionary or representative currencies, which are most various. They are mainly as follows :—

(*a*) *Greenbacks*—Government promises to pay in lawful money of the United States, by which are meant legally gold and silver coins but practically gold only, as above explained. These greenbacks are themselves unlimited legal tender as between individuals, but being convertible into gold are, of course, equivalent to gold like Bank of England notes. They are specially protected, in addition, by a reserve of £20,000,000 in gold, established at the time of resuming specie payments.

The amount of the greenbacks is fixed at $346,000,000, or about £70,000,000 sterling, which was the amount outstanding shortly after the close of the war, when further reduction was specially prohibited; but the amount in circulation is never quite so much, and at times has been a good deal less. If the amount held by the banks as cash is deducted, the active circulation of the greenbacks, i.e. in private hands as distinguished from banks and the Treasury, is almost always a good deal less.

(*b*) *Gold Certificates*—These are certificates for the deposit of gold coin that anyone may bring to the Treasury. The coin deposited is to be retained in the Treasury for the payment of the certificates on demand.

The amount of these certificates outstanding at the date of the last report of the Secretary to the United States Treasury was about £31,000,000,* but a large part of these again were held by the banks as cash, and were not in the hands of the public.

(*c*) *Silver coins*, coined under what is known as the Bland Act of 1878, by which the State was directed to purchase so much silver monthly and coin it. These coins are unlimited legal tender at the old bimetallic ratio in the United States of 16 to 1; but as their quantity has been strictly limited, and no one has been able to get them except by giving the Treasury a full equivalent in gold or gold's worth, and they are receivable in turn in payment of United States taxes and dues, they have thereby been kept on a par with gold. They are legally "lawful money" of the United States, just as gold coins are, but practically they are representative currency in the way described. They are obviously similar in character to the greenbacks, which are kept on a par with gold by similar means. They are virtual promises to pay gold, and are maintained at the same value, however the silver of which they are made may fluctuate.

The amount of this silver coinage is now very large, over £70,000,000 nominal mostly represented by silver certificates, as will be explained presently. It is used for small change only. In part it has displaced the token silver coinage previously in existence, while the

* In September, 1891, the amount was about £22,000,000 only, but this sum has again increased.

silver certificates are mainly in small denominations of less than $20.

(*d*) *Silver Certificates*—These are practically the same as the silver coins coined under the Bland Act, which they represent, with the exception that they are not unlimited tender for any amount, though the silver coins which they represent are. They are receivable, as I understand, for dues and taxes, and may be counted as part of their reserves by the national banks, though the banks, in fact, "boycott" them. But the law has stopped short of making the silver certificates themselves legal tender.

At the date of the last Report of the Secretary of the Treasury the amount of the silver certificates outstanding was $262,629,745, or in round figures, at 4*s.* to the dollar, about £52,500,000. The amount has since been increased, and practically almost the whole of the Bland coinage, with the exception of about £5,000,000 that has displaced the former token silver, is represented by these certificates, which may be stated in round figures at £60,000,000. As already explained, however, the certificates are of small denominations; like the silver coins they represent, they are used as small change only, although the silver coins are unlimited legal tender, and the banks steadily "boycott" them.

(*e*) *National bank-notes*—These are notes authorised to be issued by the national banks, which are under stringent legislation of different kinds, and they are practically guaranteed by the State, the issuing banks

depositing with the United States Treasury United States bonds of much greater market value to cover the issue, besides 5 per cent. in cash. These notes, when greenbacks were at a discount, were also at a discount; but since the return to specie payments they have been on a par with gold like all other representative currency in the United States. They used to be the most important part of the currency next to greenbacks; but for some years, owing to taxation, and the high price of the bonds which have to be deposited to secure the issues, it has not paid the banks to continue the issues, and they have rapidly diminished from an aggregate of about £70,000,000, or as much as the issue of greenbacks themselves, to about £20,000,000 only.

In addition there are about £12,000,000 of such notes still outstanding * which are in a peculiar position. They have ceased to be issues as far as the banks themselves are concerned, and the banks have deposited a sum of cash equal to them with the Treasury to enable the Treasury to redeem them. Such notes have thus become in effect Treasury notes; they are practically in the category of gold certificates or greenbacks; and until the silver legislation of the present year the cash deposited to redeem them was "ear-marked" and had to be specially kept by the Treasury, just like the £20,000,000 of gold appropriated to secure the greenbacks.

* In September 1891 the amount was only about £8,000,000, and it is now about £6,000,000.

(*f*) There are also token currencies of silver and copper coin as in a monometallic system, which require no special description.

These various currencies, it need hardly be pointed out, do not add up. This is obviously the case with the silver coins and silver certificates, which can be substituted the one for the other, but it is equally the case with the national bank-notes, which are not an addition to the greenbacks and gold certificates, because the banks themselves are holders of these gold and silver certificates. Separating the Government issues from the national bank issues, the Government may be considered responsible for about £140,000,000 of paper, against which it holds upwards of £60,000,000 of the standard substance, gold. If we include the national bank issues, but deduct from them the greenbacks and gold certificates held by the banks, so as to show the paper in the hands of the public, the whole active circulation may still be put at something like £140,000,000, against which the standard substance held by the Treasury and banks together is, as we have seen, about £80,000,000.*

So various and so peculiar, therefore, are the representative currencies of the United States, while there are minor varieties which it appears unnecessary to describe. There are, for instance, certificates of the

* This account of United States paper is still (in 1892) substantially correct with the exception that about £16,000,000 of Treasury notes under the Act discussed in this article have since been put in circulation.

deposit of greenbacks which circulate instead of the greenbacks themselves, just as gold certificates circulate in place of the gold. But it is needless to go into further detail. The important point is that, with all this complexity and confusion, originating in notions of making money abundant, the United States have arrived at nothing and have effected nothing which might not have been effected better by a thoroughly monometallic system with gold for the standard. The greenbacks, the gold certificates, the silver coins of unlimited legal tender, the silver certificates, the national bank-notes, and the fractional currencies of silver and copper coin, are all substitutionary and representative money only, however disguised, convertible into and exchangeable with the standard substance gold, but not themselves standard money. To give to some of these representative currencies, like the Bland silver coins and the greenbacks, the quality of unlimited legal tender in no way alters their real character. They only circulate to the extent there is a demand for them, and as the equivalent or representative of the standard substance itself, and they might just as well have that character distinctly avowed.

Another remark to be made is that the American system is extremely wasteful of cash, and, at any rate, it does not give the Americans the benefit of that economy from the use of paper which is one of the advantages that counterbalance the extensive use of paper money in lieu of the standard substance. When the United States resumed specie payments in 1879,

the active circulation of paper—the paper issues in the hands of the public—was about £112,000,000, against which the cash held in reserve, almost all gold, was about £30,000,000 only. Now the paper issues in the hands of the public are* about £140,000,000, but the cash held by the banks and the Treasury together is about of equal amount. The gold alone, as we have seen, is over £80,000,000, and the visible silver is over £60,000,000 more. The liabilities of the banks meanwhile have about doubled, so that some increase of reserve cash would have been justified; but if £30,000,000 sufficed twelve years ago, as there is no doubt it did, it cannot be necessary to have £140,000,000 now. Probably the gold alone is in excess of what would be required if the system were economically worked, and the silver, which has also been accumulated, is accordingly entirely superfluous. The Americans might be justified in saying that there is similar waste in other systems. They might have used a great deal of the silver coinage directly, for instance, as is done in the United Kingdom, without the intervention of silver certificates. The silver itself would have circulated to some extent instead of the certificates, and the consumption would have been large. This is in one sense true. In all monometallic systems there is waste where a subsidiary metal is used for token coinage, and paper might have been used instead. But the waste of one system does not

* *I.e.* towards the end of last year [1889], the date of the annual official reports of Government departments in the United States.

excuse waste in another. In a system, moreover, where token coinage is avowedly used for small change under automatic rules, the waste is different from and more excusable than the American waste, in that the object is security against the vagaries of the issuers of money, and this security is abandoned where paper itself circulates. If they cannot circulate the coinage itself, then, it is waste in the United States to lock it up and circulate the paper instead. They have all the disadvantages of paper without the advantage of its economy. The lock-up, moreover, operates against that inflation which has been the real object of all these miscellaneous currencies. The appreciation of gold would have been less than it is if the United States had not locked up so much of it. Silver is higher in price, and has been higher in price, than it would have been if the United States had not locked it up. Their action has made the market wholly unnatural.

It is this irregular and wasteful system, then, into which the recent proposals for silver legislation and finally a Silver Act have been introduced. The description that has been given enables us to characterise the new proposals very shortly.

They have all, in effect, been inspired by the party or parties which have made the United States monetary system the irregular and wasteful patchwork that it is. To create more money, to raise prices, has been the object of one party, while another party has aimed

purely and directly at raising the price of silver. What has been proposed and done therefore has been something to aggravate existing evils instead of lessening them.

Two leading proposals were in competition in the Legislature. One, which need not be very much discussed, as it was not carried, though it was very nearly being carried, was a distinct proposal to introduce the double standard, to authorise the coining of silver as well as gold on individual account, and to make the dollar *either* $25\frac{8}{10}$ grains of standard gold *or* $412\frac{1}{2}$ grains of standard silver. These silver dollars would have been exactly the same as the present Bland dollars, with this difference, that any one who had silver to take to the Mint would have got it coined. The passage of this law, therefore, would have made the United States bimetallic at the ratio of 16 to 1, and the speculation would at once have been—what would happen?

It is almost a pity the experiment has not been made. Bimetallists are so sure that the great nations have only to unite upon a common double standard to make that standard effective, that it would have been interesting to witness the effect in a country which is one of the foremost among the nations that were to make the agreement. For reasons I have often urged, and according to the experience and teaching of the greatest economists, the United States, suddenly introducing such a law, could not have escaped great disasters. Silver being so much cheaper than gold, the

community which tried to act upon such a law would at once have all existing debts reduced to the level of silver debts; silver would become the sole standard, and gold would be at a premium in the new money. To avoid such evils, in the interval between the passing of such a law and its coming into operation, those concerned might be expected to rush for payment of their debts in gold while there was yet time, and so create a panic. That some such disaster was apprehended clearly appeared in the course of the debates on the Silver Bill. The Senate actually passed a bill for bimetallism pure and simple; but there was immediately no small commotion, and the measure was shelved.

The astonishing thing is that, to all appearance, the party which wanted cheap money and the party which wanted to raise the price of silver united in favour of this measure, which might not have raised the value of silver at all. It is not the declaration of the standard which makes the demand for a precious metal in a country. It is the laws and customs which regulate the currency that are the most important in this respect. It is easy to make a demand for silver, with gold as the standard substance, and *vice versâ*, as the experience of the United States itself has very clearly proved. Yet no one seems to have thought that the elevation of silver to the rank of standard money might *not* have led to a larger employment of silver at all; that this would depend on laws of another kind which were receiving no attention.

The other proposal, which has actually been carried, is of the nature of the Bland Act itself. It is to the effect that the United States Treasury is to purchase 4,500,000 ounces of silver bullion monthly (at any price under $371\frac{1}{4}$ grains of fine silver per dollar, which is about 60*d.* per ounce for standard silver), and issue notes in payment equal to the value purchased, which notes are to be payable in lawful money of the United States. At the same time the Treasury is authorised to coin as much of the silver as may be necessary into "Bland dollars" and use them in redeeming these notes. These notes are also to be unlimited legal tender. The Bland Act itself is repealed. In effect, then, the new Act may be described as an extension of the Bland Act as regards the amount of silver to be purchased, and as an aggravation of the mischievous character of that measure in respect that the notes issued for the silver are to be unlimited legal tender, which the silver certificates were not, and are not to be specially redeemable in silver coin as the silver certificates were. It is an attempt to create something more than representative money, if possible, while the extension of the amount to be created makes it more difficult to apply the monometallic device of limitation of quantity, by which in part the silver certificates have hitherto been kept on a par with gold. The exact figures as regards the amount are thus important. Under the Bland Act the Treasury were directed to purchase not less than $2,000,000 worth of silver monthly and not more than $4,000,000 worth. In

fact, the Treasury has always purchased the minimum only; this minimum, however, at the low price of silver in 1889, amounting to 29,000,000 oz. in the year. Under the new Act the purchases are to be of 4,500,000 oz. monthly, or 54,000,000 oz. per annum, an increase of the annual purchases by 25,000,000 oz. There was much debate on a counter-proposal to purchase $4,500,000 *worth* monthly, which would have come to the same thing as the proposal actually passed when silver was at the price of 48*d*., but would have meant a decrease of the quantity purchased to less than 54,000,000 oz. as the price rose above 48*d*. and an increase of the quantity purchased as the price fell below 48*d*. But the final decision was to purchase a certain definite quantity only. And this quantity is in effect an increase of the annual purchases, as compared with what they were in 1889, from 29,000,000 to 54,000,000 oz., or an increase of 25,000,000 oz. There is another provision in the Act of a very special character, taking away the "ear-mark" from the cash deposited to redeem the cancelled national bank-notes referred to above, which will require separate notice; but what we have described is the main part of the measure.

To describe the measure, we think, is to show its mischievous character; but the immediate question is, What will be the precise effects as compared with those intended, both as regards inflation and as regards the somewhat inconsistent end of raising the price of silver? Have the soft money party in the United

States and the silver interest effected their purpose or have they not ?

Now, as regards inflation, there can apparently be no question. In the first instance, at least, the soft money party have failed of their object. There can be no inflation all at once.* The silver notes to be issued will have exactly the same sort of uses as the silver certificates now circulating, no more and no less. So long as the quantity of notes issued is strictly limited, and the Government receives them freely for taxes and dues, and pays them out only in exchange for the equivalent of gold, they will remain on a level with gold. That they nominally represent silver is of no consequence whatsoever. They will really be paper convertible into gold on demand. But such a currency so handled cannot cause inflation. Prices remain, as before, at the gold level.

There is a danger, of course, that in time it will not be possible so to handle this currency, and this is, in fact, the special mischief of the Act ; but the intention clearly is so to handle it, and the promoters of the Act seemed to have the idea that the new currencies would make money abundant with gold in use as it is. They did not look to the contingency of gold being displaced.

On this head, then, there is a complete deception on the part of the people of the United States, as they must shortly find out. Yet they might have been undeceived by the experience of the existing silver certificates.

* See as regards inflation under the Bland Act the article of Mr. Taussig above referred to.

These certificates have partly taken the place of cancelled national bank-notes, partly filled up a "currency" void caused by the expansion of population and business in the United States. It has been convenient that so much paper should have been available. But the paper has no more caused inflation than the increase of silver token money with ourselves has caused inflation. It circulates only to the extent demanded, flowing back into the Treasury when not required. How the idea that a currency of this kind means inflation should have originated, it would be difficult to understand if it were not for the common confusion between standard money and currency; but this confusion, there is no doubt, accounts for much. To produce inflation, the standard substance in which bargains are made must be "offered," and you do not produce that sort of effect by multiplying small change currency, of which communities will in fact absorb no more than they need. The Americans have thought to produce abundant money by multiplying representative and small change currency only. There could not be a better illustration of an end which was considered desirable being wholly missed through ignorance.

If there is to be inflation at all, it can only come through the substitutionary or representative currencies not being kept on a level with gold, and thus coming to from a new *quasi*-standard substance of their own. Then there will be inflation with a vengeance—in fact, all the well-known evils of excessive inconvertible paper. This is a danger, as already mentioned, to which the

American monetary system is now exposed. But so long as the gold standard is maintained—and this is what is hoped—prices will not rise, and money will not be abundant.

The other end aimed at by the promoters of the silver legislation—viz., a rise in the value of silver—is, however, being accomplished. Silver is for the moment enhanced in price by the large purchases which the United States have commenced to make. This illustrates a very old doctrine indeed, not so much of political economy as of business and common sense. The way to raise the price of anything is to buy it and take it off the market. This is what the United States Government is doing with silver on a large scale, and *pro tanto* the price is raised.

How much the price will be raised is a different question, which concerns the City and speculators mainly, and which need hardly be discussed here. It involves questions of detail as to future production and demand. Two points, however, seem clear. 1. The rise in silver which has taken place seems likely enough to be temporary only. The increase in the production of silver of late years has been enormous. Dr. Soetbeer's figures on this head are well-known ; but take only this fact which I find in the Report of the Director of the United States Mint, already referred to, that in 1873 the annual production of silver was 63,000,000 fine ounces, and in 1889 the amount was 126,000,000 ounces. And this enormous increase of production seems likely to continue. At the same time there is no corresponding

increase of what may be called the natural demand. The additional artificial demand for the United States, therefore, only takes up part of an increasing supply, and will not, it is probable, have any greater effect on the market than the purchases under the Bland Act, when they commenced, which were equally great in proportion to the supply of that time. After the present flutter, therefore, silver in all probability will fall back to its former level, unless some new event happens.*

2. The present rise may be to some extent nominal, forming part of a general rise of prices in gold incidental to a period of good credit. Silver, in other words, may have risen rather more as measured by gold than as measured by the average of commodities. When credit is again succeeded by discredit and depression succeeds prosperity, silver may also fall back with the average of commodities. If silver were the standard of countries economically as powerful as the countries whose standard is gold, this might not be the case. The influence of credit might in that case affect the two standard substances equally. But at present it is the gold countries which have most credit, and whose standard substance is most affected by fluctuations of credit. Still, silver has risen to some extent as measured even by an average of other commodities, and not merely as measured by gold, and so far the owners of silver, who promoted the bill, have gained. Of course, this rise in silver in all countries which have silver money is appreciation and not depreciation, contraction and not inflation—the

* Already (April, 1892) *below* its former level.

very opposite, in fact, of what has been aimed at by the soft-money party.

What owners of silver and silver-mines have gained the rest of the world lose. The natural market is also disturbed, which is a loss to every one in the end. For the present, however, there is no question as to the gainers by the American silver bubble. They are even better off than if they had got unlimited coinage of silver, which was so very near being carried.

We come then to the question of the wider interests which may be affected by this silver legislation, apart from those which are immediately at issue. The questions thus raised are very grave indeed.

The main question is the critical condition of the United States monetary system. By departing from the simplicity and perfection of a single standard in the vain hope of increasing "money," as it is thought, and so raising prices, which they think can be done by making gold and silver both standard—a thing that is impossible—or by multiplying representative and small change currency only, which has little effect on prices, the people of the United States are running the most serious risks of financial disaster. The moment the present expedients to keep all the substitutionary currency on a level with gold cease to be effective, and this currency is pressed on the market in excess, gold will cease to be standard; the gold in the United States will be either hoarded or exported, or used at a premium, and silver will fast become the standard money.

Existing creditors will receive in consequence less than they contracted for, money contracts will be disturbed, and in circumstances easily conceivable there will certainly be panic. The standard money of a country is not a thing to be lightly changed.

Mr. Balfour, in his recent bimetallic speech in the House of Commons, spoke lightly of the dangers of panic in connection with changes of standard, even from inconvertible paper to gold and the reverse. But there are changes and changes, and it is most certainly true that one of the evils connected with such transitions or with the departure from a good sound standard is panic and confusion. The return to specie payments in this country after the inconvertible paper at the beginning of the century was a most painful process, and the great panic of 1825 incidentally arose out of it. In 1869 in the United States there was a remarkable gold panic, and in 1873 there was a general money panic not unconnected with the appreciation of the paper money, which was gradually approaching par, although par was not actually reached till 1878. Within the last few months, again, we have seen that the excesses of inconvertible paper in the Argentine Republic led to monetary panic and confusion of the worst kind, and even to political revolution. To this sort of evil the United States, having got a good standard, voluntarily exposes itself in deference to the fanatics of bimetallism, stimulated by the private interests of mine owners who have silver to sell. The resources of the United States are such that even great calamities of

this sort are surmounted without fatal disaster. But the calamities may not be wholly escaped, and may be more serious than the parties who manipulate the Legislature, and even the sober business men in the United States who are compelled to look on, anticipate.

It need hardly be said that any evil of this kind occurring in the United States will react in other countries, and particularly in England. Just as the United States panic of 1873 was the beginning of our own long depression, so a new panic must have great effects. In one thing we are also specially interested. Currency securities of the United States have been largely bought here as if they were gold securities. If the transition from a gold to a silver standard takes place, these securities will unquestionably be depreciated. The income will be diminished, and the capital value will fall in even greater proportion. The United States will of course suffer from the resulting discredit, but our investing classes will first have suffered.

The crisis may possibly come before long. It is only a question of a short time when the United States will be face to face once more with the problem of surplus silver. The case at present is that there is room for new currency in the United States to a certain extent, because the process of extinguishing the national bank-note circulation still goes on, and because this is a time of good trade, when, one year with another, more small change is required. To take the place of cancelled bank-notes, and to fill up the demands of increasing population and trade. the United States Government

can easily issue more paper, and if it chooses to make the issue contingent only on the deposit of silver bullion it can do so. But the demands of this kind are limited. At the rate of issue now directed, about £9,000,000 to £10,000,000 nominal per annum, with silver at its present price, two to three years will suffice to replace the bank-notes even if the existing bank-note circulation should all be cancelled; and with the cessation of good trade the demand for currency in other ways would cease. The issue of paper, if then continued, would immediately be in excess, and a movement would at once begin to send in the gold certificates for payment and take the gold away, thus endangering the gold standard. So long as the United States Treasury has gold to pay, and is willing or compellable to pay it, the evil would be staved off, but the diminution of the amount and proportion of gold held would bring the transition within sight, and then, it may be expected, considerable events would happen. The bankers and people of the United States are not prepared for a silver standard. The moment it is seen that the promise to give them both gold and silver as standard cannot be kept, there will assuredly be a new agitation, and probably a panic, through the endeavours of business-men to make for themselves a good standard money which the Government had failed to give them.

In this connection, then, the special provision in the Act abolishing the "ear-mark" on the cash deposited with the Treasury to redeem the cancelled national bank-notes becomes important. The effect is that the

£12,000,000 thus ear-marked at present, and for which provision must be made before the Treasury can reckon a surplus, will become an ordinary liability of the Treasury for which no special provision is required, like the greenbacks in excess of the £20,000,000 of gold specially provided for their redemption. The technical surplus of the Treasury will thus be increased by £12,000,000 at a stroke; and as the surplus the Treasury is permitted to keep is limited, the £12,000,000 will have to be paid way. As no one will take silver unless forced, the payments will either have to be in gold or gold will go to a premium; while if the payments are in gold the diminution of the proportion and amount of gold held, which brings the transition to a silver standard within sight, will at once begin. Even after paying away £12,000,000 the United States Treasury would in reality have sufficient gold left to support the gold standard, but apprehension might set in at any point with results that are beyond calculation.

Another fact which points in the direction of an early crisis is the prospect of a diminution of the annual surplus of revenue over expenditure, which has hitherto enabled the United States Government to act so powerfully on the money market. Considerable stress is laid on this fact by American authorities. If the annual surplus should diminish, the Government's power of action would diminish with it, and the fact should have due weight.

It is evident, then, that the situation in the United States under the new *régime* must be extremely com-

plex and difficult. What the Treasury are to do from day to day, it will be no easy matter to decide. But the practical conclusion here must be to prepare for contraction rather than inflation. Even if £12,000,000 of gold are set free in the next few months, the general circumstances of the world's money markets are at present such that this large sum would hardly make an impression. And against any effect that may be produced must be set the obvious apprehension in New York at each withdrawal of gold for export, revealing the feeling in American circles that in the uncertainties of the monetary situation there gold must not be parted with. The inflation party have had their way in the matter of legislation, but it would not be singular in economic experience if the effect should be quite the opposite of what was intended. Yet it is to induce us to imitate the United States in follies which produce such results that our bimetallic friends have lately been so busy.

The next questions that may be agitated are those arising out of the rise in the price of silver itself. Immediately, to a certain extent, all the evils arising out of a fall in the value of silver as measured by gold, which have caused so great an outcry from India and Manchester, are being redressed. Indian finance is improved. The Indian civil servant who has to remit home gets a better price for his rupee. The Lancashire cotton manufacturer gets a better return for his goods from every silver country. But the end is not

yet, and the reverse of these operations will not be long in appearing.*

The rise of silver in gold in a few months has been from about 42*d.* to 50*d.*, or very nearly 20 per cent. It is not wholly due, I think, to the artificial movement in America, because the improvement in trade was bringing about some moderate advance in silver when the American bubble began. But the advance is still mainly due to the American speculation. And it is a great advance. Twenty per cent. in relative value is a very considerable change to take place between two moneys, and must disturb a great deal, besides setting in motion very powerful forces for the establishment of a new equilibrium. It may mean one of three things. Assuming that general prices and wages in *gold* are not changed, it means an appreciation of silver measured by commodities, and a rise in real wages in silver equal to about 20 per cent. Assuming that general prices and wages in *silver* are not changed, it means a depreciation of gold measured by commodities, and a fall in real wages in gold equal to about 20 per cent. Assuming that general prices measured by gold have risen, and measured by silver have fallen, to the extent altogether, adding the rise and the fall, of 20 per cent., then there is depreciation of gold and appreciation of silver, as above stated, with a fall of real wages in gold and a rise of real wages in silver to the extent in the aggregate of 20 per cent. Relative wages and prices in the two metals together have in any case to be adjusted to the

* Already (April, 1892) a most true prophecy.

extent of 20 per cent. Large adjustments will therefore be required to establish a new equilibrium in place of the equilibrium that formerly prevailed. What that new equilibrium will be it is impossible to foresee; but India and other silver countries must either suffer from the appreciation of silver as we have suffered from the appreciation of gold, or if they do not so suffer to the full extent this country and all gold countries must sustain *pro tanto* a similar experience to that of India, which has caused all the outcry from that country—a depreciation of our standard money in relation to that of other countries. Disturbances and readjustments of a serious kind there must be.

To some extent readjustments are already taking place. The rise in silver in April choked off at first the exports of silver to India. At the same time imports into India (exclusive of silver) were stimulated, and exports from India were checked. A similar process must continue to go on with all silver countries until a new equilibrium of prices and wages is established. Trade will assuredly suffer from so rapid a readjustment as will be necessary; while uncertainty is added to the mischief, as no one can tell how long the present artificial price of silver can be maintained. To the difficulty incidental to the different standards of the world, even when those standards are metals, the United States have contrived to add an uncertainty almost equalling the uncertainty of inconvertible paper. Silver was quietly settling down and probably finding new customers at a low price when all this gratuitous dis-

turbance occurred. Some time or other the reaction will probably be equal to the action, and there will be a temporary fall in silver to compensate the present artificial rise.*

The discussion suggests the reflection how entirely self-caused are many of the evils arising from the change in the relative values of gold and silver which cause so much agitation. If the Governments of the Latin Convention and the United States had only established monometallist systems, working automatically, a change in the relative value of gold and silver could not have been prevented on great changes of circumstances occurring, but the change would have been minimised, and probably long before this gold and silver would have settled down, for a time at least, at a comparatively steady ratio, as, indeed, they were settling down lately when the United States Legislature intervened with the present Silver Act. It is a mistake to suppose that with a monometallist standard the metal which is not the standard is boycotted. On the contrary, as the French economists always contend, a metal which is not the standard, may easily be employed for representative currency, and is, in fact, so employed under every gold standard system, just as silver and copper are now employed in England and France, and for that matter, in the United States itself. There are cases where the employment of the non-standard substance in this representative character is greater

* See last note.

than the employment of the standard substance itself. To represent silver as boycotted, therefore, by its ceasing to be standard money, has been a pure blunder. If, then, the nations of Europe and the United States had been purely and frankly monometallic, each with that metal for standard that was found most convenient, both gold and silver might have been adequately employed in the monetary systems of those countries, and both might have been cheaper and prices higher than they are now, as there might have been less of that artificial hoarding which want of definite knowledge and principle in monetary legislation has brought about. At the same time, they would probably have been steadier towards each other than they have been, the market being wholly natural and not rendered dangerous by artificial interferences, and natural demands tending to arise when either metal fell considerably in price. It is greatly to be desired that this common sense should at length prevail with all the Governments concerned; that they should learn it is not their business to make money abundant, or to attempt to regulate the price of gold and silver, but in money matters what they have to do is to provide a good system which can be done on fixed principles without raising such difficult questions. Until this common sense is more generally diffused, further monetary troubles are unavoidable, and what has just happened in the United States should put other nations on their guard.

IX.

A CHAPTER ON STANDARD MONEY.*

(*a*) *Introductory.*

THE recent discussions on the silver question, arising out of the suggestion, that while forced purchases of silver would tend to raise its price, yet the free coinage of silver, of which so much was made as having a still greater effect of that kind, was really a measure of a totally different character, and might not tend to raise the price of silver at all—have served to bring out, we think, an ignorance of the elementary principles of money on the part of leading bimetallists which accounts very much for their delusions. Their error is initial. They begin with wrong definitions, or without defining at all what they mean by money, and talk of a price for gold when gold is the standard as they would talk of a price for copper, or wheat, or any other commodity, not the standard; and of a price for silver, when silver is the standard, in the same way. Begin-

* Reprinted from the *Statist* of July, August, 1890. I am indebted to the courtesy of the editor for originally printing these notes as articles in his journal, and for the permission now given to reprint them.

ning with this fundamental error, they arrive at any sort of erroneous conclusion. Although, then, we have little hope of clearing the minds of those who are thoroughly steeped in this theory, it may, perhaps, be of some use, when we see the extravagances of the United States Legislature, and similar extravagances in high places in our own country, to recall attention to the established elementary principles of money on which the English monetary system is based, and which are the accepted creed of economists throughout the world.

Money, then, as regards its primary function, that of serving as a common measure of value, is simply a commodity selected first by custom, and (often, not always) confirmed by law, as an intermediary in transactions—a something for which in a civilised community any other thing can be sold, and with which any other thing can be bought. In other words, a particular commodity is selected to perform the function of a common measure of value; but it is and remains a commodity. Gold, silver, copper, iron, cattle, nails, shells, and many other articles have been used as such intermediary commodity; and in performing this function they are spoken of by the name of the function, that of money; but "money" is not a new and separate substance into which they are converted. Gold remains gold, silver remains silver, cattle remain cattle, and so on, while they perform this function of money; and they remain subject to exactly the same laws of ex-

change after they are used as money as before. A new use is imposed upon the substance, that is all; the substance itself is unchanged.

In speaking of standard monetary substances in this way, we use the very words of Adam Smith:—

"Every prudent man," he says, "in every period of society, after the first establishment of the division of labour, must naturally have endeavoured to manage his affairs in such a manner as to have at all times by him, besides the peculiar produce of his own industry, a certain quantity of some one commodity or other, such as he imagined few people would be likely to refuse in exchange for the produce of their industry. Many different commodities, it is probable, were successively both thought of and employed for this purpose. . . . Different metals have been made use of by different nations for this purpose.

"Iron was the common instrument of commerce among the ancient Spartans, copper among the ancient Romans, and gold and silver among all the rich commercial nations. These metals seem originally to have been made use of for this purpose in rude bars without any stamp or coinage. Thus we are told by Pliny, upon the authority of Timæus, an ancient historian, that, till the time of Servius Tullius, the Romans had no coined money, but made use of unstamped bars of copper, to purchase whatever they had occasion for. These rude bars, therefore, performed at this time the function of money." [Adam Smith, 'Wealth of Nations,' Book I., Chap. IV.]

Gold and silver and any other standard substance therefore, used as a common measure of value, are commodities performing the function of money ; and money is not a separate and independent thing.

Furthermore, it will be observed, coinage, though convenient, is not indispensable in order that these standard substances may be used. The use as money is antecedent and not subsequent to the coinage. What the precise use of coinage is may also be explained in the words of Adam Smith in the chapter from which we have already quoted :—

"To prevent abuses, to facilitate exchanges, and therefore to encourage all sorts of industry and commerce, it has been found necessary in all countries that have made any considerable advance towards improvement, to affix a public stamp upon certain quantities of such particular metals as were in these countries commonly made use of to purchase goods. Hence the origin of coined money, and of those public offices called mints ; institutions exactly of the same nature with those of the aulnagers and stamp-masters of woollen and linen cloth. All of them are equally meant to ascertain, by means of a public stamp, the quantity and uniform goodness of these different commodities when brought to market."

In other words, coinage is only a process of branding or stamping, and nothing else. The thing which performs the function of money is gold, or silver, or any other commodity, as the case may be ; and there is no such thing as money in this sense dis-

tinguishable from the standard substance of which it is composed.

These statements of Adam Smith are so universally the "common form" of economists that it is really unnecessary to quote or refer to other authorities. It may be useful, however, to remind a new generation, which has forgotten the burning currency controversies of a former time, that Sir Robert Peel's famous definition of a pound, in his speech on the Bank Charter Act, is exactly in accordance with these descriptions of Adam Smith. A pound, he said, is 123 odd grains of standard gold (113 odd grains of fine gold). The coin called a sovereign is stamped in a certain way to show that it contains this quantity of gold. But the real unit is so many grains of gold, and nothing more. In practice this absolute identity between the substance gold and the coined gold exists. The reserve of the Bank of England, on which all wholesale transactions rest, is composed as readily of bullion and foreign coin as of sovereigns, these last being really kept for use as a sort of small change only.

The only other authority we need quote is Jevons, who is the best of the latest authorities on "money." Mr. Jevons, in his book on "money" in the International Scientific Series, writes:—

"All that a standard of value means is that some uniform unchangeable substance is chosen, in terms of which all ratios of exchange may be expressed and calculated, without any regard whatever to the feelings or mental phenomena which the commodities produce

in men. For reasons already stated, one or other of the metals, gold, silver, or copper, has usually been considered most suitable for constituting the standard substance.

"The absolute weight or magnitude of the unit of money is a matter of little or no importance, provided that all people agree upon the same unit, and that it be permanently and exactly defined, and afterwards adhered to. Before the English yard was fixed it would not have mattered whether it was a few inches longer or shorter; it does not matter, indeed, whether the inch, the foot, the furlong, or the mile is the unit, provided that one of them is definitely fixed, and the others referred to it by known ratios. So it is really indifferent whether we regard the pound troy of standard gold, or the ounce, or the number of grains in a sovereign, as our standard. It is only requisite that every contract expressed in money shall enable us to ascertain exactly how much standard gold is due from one person to another."

Such, then, being the definition of money, nothing more is necessary to show the absolute absence of meaning in the question Sir William Houldsworth has been putting with such an air of triumph—whether any man having 39½ ounces of silver will take anything less than 40 crowns, or £10, for them, if the mint will give him back 40 crowns, or £10. It is obvious that the Mint only gives him back his 39½ ounces of silver, with a stamp added to show weight and fineness. In the new form the 39½ ounces would be called 40 crowns,

or £10; but they would be 39½ ounces of silver, and nothing more. He would not get a different thing back from the Mint, but the same thing. To ask whether he would take anything *less* for his silver than the 40 crowns, or £10, is absurd, because there is no exchange of one article for another of any sort or kind at the Mint. Gold remains gold, and silver remains silver at the Mint, and nothing is changed by the stamp.*

Of course, it will be understood that we are speaking of standard money only, and of the action of mints where no seignorage is charged. Where a seignorage is charged the coin is a manufactured article, and is worth so much more than the uncoined substance by a varying sum not exceeding the seignorage; but this is a detail which requires no elaborate discussion. For a long time the practice of all civilised communities has been to dispense more and more with seignorage on their standard coinage; although the French Mint still charges a small seignorage upon their standard gold coinage, and also charged a seignorage (at a different rate) upon their standard silver coinage before that coinage was suspended. In England there is legally absolute identity between coined and uncoined gold. Practically there is a charge of 1½*d.* per ounce, which the Bank of England obtains for the convenience of giving coin in exchange for bullion at once, instead of the customer having to wait while his bullion is being coined at the Mint; but, to all intents and purposes, the identity between coined and uncoined gold is complete.

* And see above, p. 137.

Of course, money is used in other senses besides that of standard. It has to fulfil other functions besides that of serving as a common measure of value. Bargains have to be executed, as well as made; and for this purpose there is a "circulating medium," which may consist partly of the standard substance in the form of coin of full value, partly of the standard substance in the form of coins on which heavy seignorage is charged, partly of other metals artificially rated to the standard substance, partly of Government or banking promissory notes (paper money); partly of cheques, book debts, and other instruments of credit; and partly, in these latter days, of international securities. It would probably be impossible for any one to enumerate all the different substitutes for the standard substance which may be employed in modern business. The general effect, however, of all the modern arrangements is that the standard substance is immensely economised. Although it is the common measure of value, there is no great need to handle it actually in comparison with the immense transactions of purchase and sale of which it is one of the terms. To select an article for standard, therefore, by no means implies a great demand for the article, such as would have a great effect upon its value in exchange, that is, upon the prices of the other commodities expressed in it. Such a demand may or may not exist, and whether it will exist or not will depend on other laws and customs as to circulating medium and the like, and not upon the standard at all. We see this in England, where the basis of our immense

wholesale transactions is £20,000,000 only, a large part of which sum we might require whether gold were our standard or not. But the principle is of universal application. The whole machinery for making payments, for regulating the circulating medium, involves different questions and principles from those which are involved in the standard itself.

Thus, in England, the law prohibiting the issue of paper money for a less denomination than £5, makes room for, and almost compels, in present circumstances, the use of a considerable amount of gold in the form of sovereigns, which, though of full weight as standard, are really used as small change; and for which gold tokens, with a heavy seignorage charge, could easily be substituted. In Germany and France also, there are laws making the lowest denomination of paper a high one, and in France in the early part of the century the lowest denomination was £20. In the United States and other countries, again, the denomination of the paper is so low that no gold is required in this way, although in some, by legislation of yet another kind, a void is made for gold. In fact, the laws and customs by which the demand for the standard substance is settled in a given community, after the standard itself has been selected, are almost infinite in form and character, and the selection of the standard gives no sort of clue to the extent of the consequent demand for the standard substance, if any. Gold being the standard in a given community, there may be a larger demand for silver than for gold; and silver being the standard, there

may be a larger demand for gold than for silver. Nothing can be predicted beforehand. Laws and customs irrespective of the laws or customs by which the standard is selected may vary the demand indefinitely.

(*b.*) *The Bimetallic Formula.*

Having thus shown the nature of standard money, which is merely gold or silver or any other substance used for the function of a common measure of value, and having pointed out the essential differences between this standard substance and other forms of money, we propose now to apply the principles laid down. We begin with the bimetallic formula itself, which Sir William Harcourt said he could never understand, and we believe nobody else could.

The bimetallist, in effect, says that law may constitute two standards—may declare that a bargain, when made in "money," shall mean a bargain to pay and receive either gold or silver at the ratio of 1 to 15½, or whatever the ratio may be. A pound sterling in the bimetallic system would thus be *either* 113 odd grains of fine gold, *or* 15½ times that number of grains of fine silver, or whatever number of grains may be fixed, according to the ratio selected. But if the definitions above given are true, as they are undoubtedly both true and universally accepted, and if gold and silver are thus merely commodities, performing, when selected for standard, the functions of a common measure of value, then the declaration of an optional or alternate

standard only leads indirectly to what may as well be arrived at directly, viz., the use of a single standard. Gold and silver being commodities subject to different conditions of production and demand, the declaration by law or custom that a bargain may be made in one or the other at a ratio, necessarily means that, except at a moment when the market ratio may happen to coincide with the legal ratio, the bargain will be understood to be made in the metal which may be obtained at a cheaper rate than the ratio. If the ratio is 1 of gold to 15 of silver, and gold in the market exchanges for 16 parts of silver, then no one would pay his debt except in silver; and people, in making bargains, would either have silver in view, or, if they had gold in view, would stipulate for payment in gold. The so-called double standard thus becomes in practice a single standard *at once;* and the demand for the metal which becomes the single standard is from that moment the same as the demand for the standard substance in a system that is frankly and avowedly monometallic. Bimetallism, properly speaking, is accordingly a sheer impossibility. The proposition is so evident that even bimetallists admit it when pressed, as Sir William Houldsworth has admitted it; but they always hark back to the opinion that in some way or other, although there can only be a single standard, the declaration of a double or optional standard at a ratio has a mysterious influence in making that ratio effective.

It remains true, however, that although a so-called bimetallic standard inevitably becomes a single stand-

ard from the nature of things, yet a frankly monometallic standard is the better of the two, just because it is clear and definite, and definite arrangements can be made on the faith of it with respect to the various descriptions of circulating medium that may be required. What was really aimed at in bimetallic systems, before the strange theories of modern times, was to have gold in use for large business and large payments, and silver for smaller transactions and small payments. At first no other way presented itself to secure this end except to tariff the coins of one metal in coins of the other. Moreover, when seignorages were heavy, and gold and silver happened to be fairly steady in price, this system roughly answered. But it was always imperfect, as the experience of the seventeenth century, when a great change in the ratio of silver to gold took place, and when the utmost difficulty was experienced in keeping coins of both metals in use, only too clearly proved. The same imperfection has been found in more recent times, the United States, after 1850, having experienced a difficulty in keeping silver in use, and the same difficulty having been experienced in France a little later. Now this end of bimetallism is effectually accomplished in a so-called monometallic system by means of token money—the limited coinage of a subsidiary metal with limited legal tender. A monetary system with a monometallic standard can thus provide *better* for the use of both gold and silver than a so-called bimetallic system.

It is argued sometimes that by means of the alterna-

tion of standards, the liability to alternation and the impossibility of having the two metals together being admitted, the two metals are kept steadier towards each other than would otherwise be the case, and that this is a great advantage, especially for international trade, of the bimetallic system, so great as to compensate all other disadvantages. But this opinion is found, when analysed, to be based on the supposition that the selection of standard determines to a great extent the amount of employment for the standard substance, which, we have seen, is not the case. If the selection of a metal for standard does not affect its value very much, then the declaration of an alternate standard will not affect either very much, or may affect them, such is the contrariness of things, in an opposite way to what is supposed. Gold, for instance, might go out of use as standard, and yet become more in demand than before as circulating medium or for reserves. Silver might come into use as standard, and yet be less in demand than before. No one can tell beforehand, or how human laws and customs may change. It is found, also, according to past experience, that although under an alternating standard England, France, and the United States have all been willing to let gold become their standard substance and principal money, yet there is no instance on record of a community willingly changing back to silver. The alternations in past times have all been in the direction of letting gold become standard. A really alternating double standard has yet to be tried. If the United

States should make the experiment now of going back to silver, it will be a very interesting one. In any case, it is quite certain silver will not rise and gold fall relatively to each other very much as the mere consequence of the change of standard. The interest on this point will lie in what the other laws and regulations will be.

There are other objections to this compensating theory which some of the least extravagant bimetallists, as distinguished from their fanatic allies, often urge. It only operates at the time of an alternation; and if there is no alternation, people of course, even on the hypothesis of some advantage in the bimetallist arrangement, might as well have a frankly monometallist system at once. They should also distinguish between a tendency and the degree to which a tendency may operate in effect; for it is quite possible that an alternation of standard may have "some" influence in keeping gold and silver steadier than they would otherwise be, and yet that influence may not be so great as to keep the market ratio near the legal ratio, or prevent great fluctuations when great causes of change occur. A great influence must be proved if practical action is to be taken on this hypothesis; and no such influence can be proved.

Altogether, then, this review of the bimetallic formula, by the light of the doctrine of standard money, shows how far astray from the sober axioms of monetary science the fanatic school of bimetallists has strayed. They have forgotten the very origin and

definitions of money, and speak of money as a substance distinct from the things of which it is made, instead of as a function of the particular commodity which happens to be selected as the common measure of value, this commodity, as respects its value in exchange with other articles, remaining a commodity. On this initial error the whole fabric of bimetallism is built up, just as schemes of paper money have been built up. The only way, then, to deal with bimetallists is to refer them back to Adam Smith and other expounders of the A B C of monetary science.

(*c*) *Imperfect Monetary Standards.*

In addition to the attempt at a double standard for money, which cannot possibly succeed, because one or other of the articles selected inevitably becomes a single standard, so that a double standard at best is an alternating one, there have been numerous attempts in human history to dispense with a monetary standard substance of a perfect kind, such as we have described in former articles, and to substitute other things which cannot properly do the work. It has seldom been the avowed intention to do this. Governments in various ways have been tempted to tamper with the currency, as the American Government is now being tempted, and in trying to increase currency, or to substitute currency of artificial manufacture for the standard substance, have departed from a proper standard, and made a new one of an imperfect sort which is without

the advantages of a proper standard. Some account of these imperfect standards, and of the differences between them, and those where a standard monetary substance is properly employed, may thus be useful.

The first and least mischievous of these imperfect standards is where a seignorage is charged on all coins of the standard substance, so that there is a difference between the coins and the standard substance itself, the coins being weight for weight more valuable, as a rule, by the amount of the seignorage than the substance of which they are made, and these coins constituting in effect a new *quasi*-standard substance in which, and not in a standard substance proper, bargains are made and executed. Until about two hundred years ago, when seignorage was given up in England, most nations had only these *quasi*-standards. Governments seized upon the business of coinage and made a monopoly of it as a means of raising revenue, with the result that the idea of natural money which is described by Adam Smith was almost lost, and the notion rather came to be that Governments made "money." Still, where Governments did nothing more than charge a moderate seignorage, a *quasi*-standard of this kind could be worked. The main difference between it and a proper standard, such as we have long been accustomed to in this country, was that the coins of the standard substance were no longer practically the same as the standard substance, weight for weight, and usable for all purposes as the standard substance itself; but they were only useful for local

circulation where they were "legal tender," whereas the standard substance and coins of it had their natural uses, dependent in no way on the fiat of the Legislature. The value of such coins, however, was still dependent on, and related to, the standard substance itself. If such a substance were to have lost all exchangeable value, these coins made of it would also have lost their value.

The special inconvenience of such *quasi*-standards was found to be that at times they were only of the value of the metal contained in them or a little above it, and at other times they were of that value *plus* the seignorage, or a part of it. As it was only in the contingency of the value being equal to the metal *plus* the full seignorage that new coinage could take place, the want of correspondence between the coined substance and the uncoined substance brought about at times a scarcity of coinage for the purposes of circulation which was highly inconvenient. The fluctuation between the value of the coins as metal only, and their value plus *seignorage*, was a practical nuisance, which was finally got rid of in England, as already stated, two hundred years ago, and which has been more or less got rid of in other countries since.

There was one convenience of such coinage, however, in a bimetallic system which we have already referred to. The seignorage was a partial protection to the coins of any metal becoming dearer than the legal ratio against the melting-pot. Until the metal rose by an amount equal to the percentage charged for seignorage,

the coins of it remained more useful as coins than as metal. In the case, therefore, of *small* fluctuations between the two metals, supposing a legal ratio to have been hit upon intermediate between the extreme market ratios, a bimetallic system could go on with the appearance of a fixed price between coins of two metals, though there could not be a fixed price between the metals themselves. But this convenience was gained at the expense of the inconvenience of an imperfect standard, and in practice was too irregular and untrustworthy to count for much. With a proper standard, of course, bimetallism is an absolute impossibility; but it may be useful thus to notice historically one of the causes of its apparent success in former times, when fluctuations between gold and silver were within narrow limits. One of the strangest of the strange blunders of bimetallists in recent years in their practical advocacy of bimetallism is their proposal to have the coinage of the two metals without a seignorage, whereas a seignorage was one of the main conditions that made bimetallism even in appearance partially workable for a time.

A *second* kind of imperfect standard is formed by a deteriorated or worn coinage. Where coins of a standard substance are not kept perfect, but are gradually worn down without being withdrawn by the issuers, they tend to constitute a new standard substance, exchanging at some value intermediate between the exchange value of their contents as bullion and the nominal value impressed upon them. The average "wearing down" takes the

place, in fact, of a seignorage in a system where a seignorage is not charged on the standard substance, and the results are much the same in character though infinitely worse in degree. The uncertainty and confusion that may arise are enormous, of which a good illustration is given by the condition of the English silver coinage just before the great recoinage of 1696, which Macaulay has described so graphically. Many such illustrations could be given. The liability of coins to deteriorate is, in fact, one of the reasons why the monetary standard ought always to be in the substance itself, or in coins identical with the substance.

At what point the exchange value of such a deteriorated coinage will settle down it is impossible to determine beforehand. At the time of the great English recoinage in 1696 it was ascertained that the bullion contents of the coins on the average were only half what they had been when new. But the discount on them was not nearly so great. Although they did not exchange at the full rate of what should have been their bullion contents, they exchanged for more than their actual bullion contents. The credit of the Government responsible for them, the prospects of a recoinage in which the worn coins would be taken back as if they were of legal weight, the fact of their being good for small payments as a sort of counters—all contributed, there is no doubt, as they do with inconvertible paper, which we shall notice presently, to establish the actual exchange value of such a deteriorated coinage.

The Gresham Law, of which so much is heard, may be explained at this point. It was merely an observation of Sir Thomas Gresham, in the time of Queen Elizabeth, that when a great bulk of the standard coinage had deteriorated, the bad coins drove the good out of ordinary circulation—that a new *quasi*-standard came to be formed of the bad coinage; and that good coins of the same nominal value could not co-exist with them in circulation. The good coins could also be exported, where the bad coins could not be. But there is no law to the effect that *all* the good coins are necessarily exported from such a country or even most of them, as has been so often supposed in recent bimetallic discussion, where the law is applied by analogy to the coins of that metal in a bimetallic system, which becomes cheaper than the legal ratio, and which drives the dearer metal out of circulation. The assumption constantly is that the dearer metal, if displaced, can only be exported; but the law applies to the displacement from circulation as standard only, and not to the exportation, which is not a necessary consequence. Though displaced from circulation as standard, the dearer metal may be used at a premium, and it may be hoarded.*

A *third* kind of imperfect standard is formed by inconvertible paper. Paper money, it should be understood, consists of promises to pay. Where the paper is convertible on demand, it is maintained in value equal

* See, for a fuller exposition of the Gresham Law, an article of mine in the *Economic Journal* (No. 2).

to the standard, and is, in fact, good representative money or currency merely. Where, however, convertibility on demand is not maintained, where the promise, in fact, is not kept, a new state of things arises. If there is some belief that the promise will be kept, though at an uncertain time, the paper may remain in use as money, and the "promises to pay" become, in fact, an imperfect standard substance, related to the standard substance proper, just as the other two imperfect standards already described are related to it. The fluctuations and uncertainty are, however, greater in the case of inconvertible paper than in the case of coinages on which a seignorage is charged, or which have deteriorated by wear and tear.

One of the main causes of paper becoming inconvertible in past times has been excessive issue, and misunderstanding has arisen through the concentration of attention on this feature in the case of issues by Governments of good credit, like that of England at the beginning of the century, or the United States during the Civil War. The idea has got about, as if it were axiomatic and universally true, that the exchange value of inconvertible paper issued in excess falls in comparison with the standard substance proper; *i.e.*, that prices rise in the new *quasi*-standard substance in proportion to the excess of issue.

There is a good deal in the language of Ricardo to encourage this notion, which was apparently supported by the experience of the early part of the century. There is a tendency for inconvertible paper to fall to a

discount when it is in excess, and to fall the more that excess is increased. But there is, in fact, no proportionality between the excess of issue and the discount on the paper, the exchange value of which appears to be settled by a great variety of considerations, as has been witnessed in recent times in the case of the inconvertible paper in Russia, and even more strikingly in the case of the inconvertible paper in the Argentine Republic. The credit of the Government, the prospect of the inconvertible paper becoming convertible at some future time, and various other causes, determine its exchange value from time to time as well as the excess or non-excess of issue.

About the mischiefs of inconvertible paper all are agreed, and nothing more need be said as to the danger of this sort of imperfect monetary standard.

A *fourth* kind of imperfect monetary standard remains to be noticed, though there is little to be said of it, as it is yet merely in the ideal stage. This is where a selection is made of a standard substance that is not an independent commodity like gold and silver, having a natural use apart from money, but which is formed *ad hoc* by a compound of the two metals, gold and silver, or by a compound of many commodities as in the tabular standard of Jevons. A compound of gold and silver was suggested by Mr. Marshall before the Gold and Silver Commission, and has often been suggested before, though not precisely in the form explained by Mr. Marshall. The objection to all such standards as ordinary monetary standards is that the public cannot

conveniently give and take delivery in the standard substance itself, as they can do with independent commodities like gold and silver. The independent utility of a commodity selected as a standard monetary substance, apart from its utility in the money form, is in fact a great point in its favour, which must be given up if a compound standard is selected. Such a compound standard may, however, be made use of for special purposes in contracts over long periods, though it could not fulfil the functions of a proper monetary standard in the daily transactions of business.

All these imperfect standards have this in common—that they are not independent standards, but are related to something else; they are not commodities having independent utility, and being continually in supply and demand for other purposes, which makes it convenient to select them as the intermediary commodity for performing the functions of a common measure of value. And because they are not thus independent, like a good monetary substance, they are not good standards. Some are worse than others, and deteriorated coinages and inconvertible paper are very bad things indeed; but none are so good as either gold or silver by itself, for the ordinary business of life.

It is an additional advantage of a good standard of either gold or silver that it may be selected for use as a common measure of value, without altering very much the supply and demand of the article itself, so that the exchange value of the article may be wholly left to natural conditions. Representative money of paper-

token coinages, and other expedients,may replace th e standard substance indefinitely when contracts have to be fulfilled. The article, in fact, like a wire in duplex telegraphy, may be made to perform double work—the work of ornament, or hoarding, or whatever the use of the article may be, as well as the work of standard money—without any further demand for the supply of it as such standard money. This is a great convenience. No doubt communities may make the mistake, as is, perhaps, done in England, of appropriating too little of the standard substance for standard money uses; but the irreducible minimum, making all allowances, is really not a large one. Governments and communities, therefore, are free to select their standard substance without any apprehension that they will thereby alter its value very much from what it would otherwise be; though some of their other monetary arrangements, such as those for small change, may have great effect on the metals handled, whether standard or not. But it must not be thought, on the other hand, that Governments, when they deal with small change and currency, are dealing with standard money. The distinction is a vital one, and should never be lost sight of.

(*d*) *The Quantity of Money and Prices.*

The distinction to which we have drawn attention in previous articles between the standard monetary substance and that kind of "money" which is more properly described by the word "currency" is especi-

ally serviceable in clearing up a great deal of the confusion which has been so manifest in recent discussions as to the relation between the quantity of money and prices. Without either side defining what they mean by money, one side has argued that prices are a function of the quantity of money in proportion to the commodities which money circulates; and another side has been equally positive that the quantity of money is absolutely elastic, and varies indefinitely almost at the pleasure of those using it. Both sides have also had much to appeal to in support of their arguments. There are many facts to show that if prices are not exactly a function of the quantity of some kinds of money in proportion to the commodities circulated, yet the quantity of money is intimately associated with the range of prices; and fluctuations in prices appear to be occasioned by fluctuations in the quantity of money. There are, however, many facts to show that other sorts of money, especially paper money, are almost indefinitely elastic, and can be brought into existence on a great demand for money arising and extinguished when the demand passes away; and also that metallic money, which is not so elastic as paper money, may, nevertheless, vary in amount in different monetary systems, or in the same system at different times, without any proportion to the range of prices or amount of business done. This confusion is very much cleared up, as we have suggested, by attention to the distinction between the standard monetary substance and other forms of money.

When we make this distinction we are enabled to see at once that, while it is true that money in the narrower sense—that is, money which is more properly described as currency—is indefinitely elastic and may rise or fall in amount according to the demand for it, which demand again is only in part determined by the range of prices, yet the amount of the standard monetary substance itself, in relation to all the demands upon it, cannot but be an important factor in determining the ratio at which it exchanges for other articles.* In this sense, to say that the quantity of money regulates prices is only the same thing as to say of any article that is bought or sold, that its quantity is a material factor in determining its value. If we were told that copper or iron or wheat were rising because there was a deficiency of the supply of them to meet all the demands, we should accept the statement as a matter of course. But what is true of copper or iron or wheat, must equally be true of any commodity which happens to be the standard monetary substance. If gold or silver is that substance, and gold or silver is increasingly in demand without any corresponding increase in supply, then people who want gold or silver for any purpose must give more for them. If, on the other hand, the demand for gold or silver falls off, or the supply increases without any increase in demand, then those who want gold or silver will not require to give so much of other commodities for them. In the former case, the article which is the monetary substance being

* See *supra*, "A problem in money," p. 98.

the standard in which prices are expressed, the rise in its exchange value will be described as a fall of prices, and in the latter case the fall in its exchange value will be described as a rise of prices. But the rise or fall will be equally due to the scarcity or abundance of the commodity in relation to the demands upon it. In this sense, then, there is always and necessarily a direct relation between the quantity of money, that is the quantity of the standard monetary substance in the market, or which may be brought to market, and prices, just as there is a direct relation between the quantity of any article and the ratio at which it exchanges for the standard monetary substance itself, and through the intervention of that substance for other things.

We see, then, how widely mistaken those monometallists have been, who, in their dislike of bimetallism, have denied that the recent great demands for gold in proportion to its supply were likely to have caused a rise in its exchange value for other things. Looked at in this way, the fall of prices is itself a proof that gold, in relation to all the demands for it, has been relatively scarcer than it was. Everybody who has wanted it has had to give more for it. If everybody who wanted coal or pig-iron was giving more for it than before, we should not hesitate to say that coal or pig-iron were relatively more in demand than they had been; and what we should say of coal and pig-iron we must also say of gold or silver in a like case.

But while this relation of quantity exists, and must necessarily exist, between the standard monetary sub-

stance and all other commodities, just because the standard monetary substance is itself a commodity, we must not assume that what is true of money in this sense is true of "currency." It is obviously not true. Currency may or may not consist of the standard monetary substance at all. It may be one thing to-day and another thing to-morrow. No doubt the use of the standard monetary substance for currency purposes makes the whole demand for it different from what it would otherwise be; but the demand for it for such purposes affects its value only in the same way that any other demand would affect it. Just as the demand for a silver token currency in a gold monometallic system affects the value of silver, so a demand for a gold currency in the same system affects the value of gold. In either case the value of the gold and silver respectively is determined by the higgling of the market, and the currency demand is only one out of many demands having no "special" influence on the exchange value of the gold and silver themselves.

In either case also what the currency demand for gold or silver will be, depends upon a great variety of habits and customs. Fashion has almost as much influence upon it as it has upon the materials for ladies' dresses. It is very little determined, indeed, by the law declaring what the standard is to be. One community uses cheques freely; another, though it uses cheques less, uses bank-notes and other forms of paper more; accident almost determines how much of gold or silver will circulate as small change; habits and customs

determine how much of either metal will be locked up as private or public hoards. No rule can be laid down beforehand. But the fact that there is no proportionate relation between the quantity of currency and prices does not alter the fact that the quantity of the standard monetary substance itself offering in the market is a material element in determining the ratio at which it exchanges for other commodities.

In this way, then, it appears to us, the conundrum which has puzzled so many of late years, and which puzzled specially the Royal Commission on Gold and Silver, is to be explained. The disputants on both sides have not defined what they meant by money, and they have been talking all along of different things.

Some monometallists, as we have already hinted, in their eagerness to refute bimetallism, have given a great advantage to their opponents by denying altogether the necessary connection between a fall in general prices and a relative scarcity or short supply of gold which they have foolishly done on the score of gold, in the form of currency, being abundant enough. Instead of observing, as they should have done, that there is money and money, and that the standard substance might be "scarce," while there was no such scarcity of currency, they have been content to perplex their opponents by ringing the changes on the supply of currency. Equally, however, we need hardly say, and even more than equally, the bimetallists are at fault in looking at the currency employment merely when they try to prove the scarcity of a standard substance, and

hoping to correct the evils of such a supposed scarcity by increasing currency. Their whole idea is a delusion from beginning to end. The relative scarcity of the standard substance gold in recent years has arisen from causes independent of currency. It is not to be corrected, if it is an evil, by multiplying currency; or by declaring something else to be standard as well as gold. The entire habits and customs of people as to the use of gold and silver, and not merely the law of standard, must be changed if gold is to be made abundant and gold prices are to rise. It was *this* answer which should have been given to the bimetallist, instead of a denial being given to the facts, staring everyone in the face, that money, in the sense of the standard monetary substance gold, is relatively scarcer than it was.

Historically, it may also be noticed that bimetallists and others who have confused money in the sense of "currency" with "standard money" have been much too hasty in adopting, as they thought, the quantity of money and prices theory from Ricardo and other great authorities. There is much verbally in Ricardo and other old authorities to countenance the view that prices are a function of the quantity of money and the quantity of commodities which money is employed to circulate. But Ricardo and others were equally careful to say that gold and silver were commodities dependent on supply and demand and cost of production for their ratio of exchange with other articles. In speaking of the quantity of money and prices, they did not suppose they were contradicting the notion that

gold and silver were like any other commodities. The explanation of the apparent inconsistency seems to be that the supposed theory of the relation of the quantity of money and prices was not put forward by Ricardo and the older authorities as a theory applicable to every kind of money, or every definition of money; but was little more than a rough description of the observed facts as to inconvertible paper money in comparison with the metal which it represented where the paper money was issued in moderate excess under the authority of a Government in good credit. What they said in effect was that a certain quantity of the metal constituting the standard substance being required in a natural automatic system, then the substitution of paper *pro tanto* displaced the metal, and when inconvertible paper was issued in excess of the displaced metal it tended to fall in value—proportionately to the excess, it was also stated, though this statement was not made as a scientific theory, but merely as a description of fact. There is nothing to show that a complete theory as to the relation between money of every kind and prices such as bimetallists have developed was intended. Now it is evident from Russian, Argentine, and United States experience that even as regards inconvertible paper the doctrine of an excess of issue causing a proportionate fall in its value was not justified as an accurate scientific theory; while it is equally evident that the theory was not meant to apply at all to the circumstances by which the amount of the standard substance used in a natural system is deter-

mined. In effect, then, bimetallists and others have converted a rough description of observed facts as to excessive issues of inconvertible paper in special circumstances into a theory of money applicable to standard substances as well as to paper currency, which the original author of the theory could never have intended. Ricardo and the older authorities certainly deserve more careful study on this point. Nothing is more dangerous than to extend an explanation of observed facts beyond the scope of what was in the mind of its authors; and to such an extension of the observations of Ricardo, especially as to the effect of excessive issues of paper in comparison with the natural amount in use as money of the standard monetary substance, we must ascribe the origin of the quantity of money and prices theory in the form in which it has lately been presented in bimetallic discussions. Rightly interpreted, Ricardo and the older authorities are responsible for no such theory.*

* Mr. J. H. Norman, whose writings on the subject of money are most valuable, goes so far as to maintain that the word "money" should be confined to "standard money" only. I fear this would be a departure from common usage, and often inconvenient in practice, but the importance of the distinction between "currency" and "standard money" in many discussions can hardly be exaggerated.

APPENDIX A.

STATEMENT of the Rate of Exchange on Paris on the first Post-day in every Month, since January, 1820, and of the Premium on Gold at Paris at the same time. (See pp. 53–62 of preceding volume.)

	Exchange in London at Three Months' Date.		At Paris.		
1820	Fr.	c.	1820	Pr. °/∞	Fr. c.
Jan. 4	25	15	Jan. —	Prm. on Gold	These cannot be obtained.
Feb. 1	25	22½	Feb. —	,,	
March 3	25	32½	Mar. —	,,	
April 4	25	50	April —	,,	
May 2	25	67½	May —	,,	
June 2	25	80	June —	,,	
July 4	25	82½	July —	,,	
Aug. 1	25	82½	Aug. —	,,	
Sept. 1	25	87½	Sept. 25	,,	7 50
Oct. 3	25	92½	Oct. 2	,,	9 —
Nov. 3	25	85	Nov. 2	,,	7 —
Dec. 1	25	85	Dec. 1	,,	3 50
1821			1821		
Jan. 2	25	90	Jan. 2	,,	5 —
Feb. 2	25	85	Feb. 2	,,	9 —
March 2	25	87½	March 1	,,	7 50
April 3	25	90	April 3	,,	7 50
May 1	25	95	May 2	,,	9 —
June 1	26	—	June 3	,,	13 —
July 3	25	5	July 3	,,	13 —
Aug. 3	25	75	Aug. 3	,,	5 —
Sept. 4	25	85	Sept. 4	,,	7 —
Oct. 2	25	87½	Oct. 3	,,	8 50
Nov. 2	25	80	Nov. 6	,,	5 50
Dec. 4	25	82½	Dec. 3	,,	7 50

APPENDIX A.—*continued.*

	Exchange in London at Three Months' Date.		At Paris.	
				Pr. °/₀₀
1822	Fr.	c.	1822	Fr. c.
Jan. 1	25	80	Jan. 3	Premium on Gold 5 50
Feb. 1	25	60	Feb. 1	,, 4 —
March 1	25	55	Mar. 2	,, 4 —
April 2	25	50	April 2	,, 4 —
May 3	25	37½	May 2	,, 3 —
June 4	25	55	June 1	,, 1 —
July 2	25	82½	July 2	,, 4 50
Aug. 2	25	70	Aug. 3	,, 5 50
Sept. 3	25	77½	Sept. 3	,, 4 —
Oct. 1	25	85	Oct. 1	,, 5 —
Nov. 1	25	72½	Nov. 2	,, 7 50
Dec. 3	25	72½	Dec. 3	,, 5 —
1823			1823	
Jan. 3	25	75	Jan. 2	,, 3 50
Feb. 4	25	60	Feb. 1	,, 4 —
March 4	25	95	Mar. 1	,, 4 75
April 1	25	22½	April 1	,, 7 —
May 2	25	95	May 1	,, 9 50
June 3	26	—	June 2	,, 14 —
July 1	25	90	July 2	,, 11 —
Aug. 1	25	95	Aug. 2	,, 12 —
Sept. 2	25	95	Sept. 2	,, 10 —
Oct. 3	25	95	Oct. 2	,, 11 —
Nov. 4	25	85	Nov. 4	,, 8 —
Dec. 2	25	80	Dec. 4	,, 7 50
1824			1824	
Jan. 2	25	72½	Jan. 3	,, 6 75
Feb. 3	25	70	Feb. 2	,, 5 50
March 2	25	70	Mar. 4	,, 5 —
April 2	25	75	April 2	,, 8 —
May 4	25	57½	May 3	,, 2 50
June 1	25	60	June 3	,, 5 —
July 2	25	62½	July 3	,, 5 —
Aug. 3	25	40	Aug. 3	,, 3 50
Sept. 3	25	40	Sept. 3	,, 2 —
Oct. 1	25	50	Oct. 2	,, 2 —
Nov. 2	25	40	Nov. 2	,, 2 —
Dec. 3	25	35	Dec. 4	,, 1 —

APPENDIX A.—*continued.*

	Exchange in London at Three Months' Date.		At Paris.		
				Pr. °/∞	
1825	Fr.	c.	1825		Fr. c.
Jan. 4	25	32½	Jan. 4	Premium on Gold	1 —
Feb. 1	25	35	Feb. 3	,,	1 —
March 4	25	32½	Mar. 3	,,	2 —
April 1	25	35	April 2	,,	2 —
May 3	25	35	May 3	,,	—75/100
June 3	25	32½	June 4	,,	2 —
July 1	25	35	July 4	,,	3 50
Aug. 2	25	35	Aug. 4	,,	1 50
Sept. 2	25	37½	Sept. 4	,,	1 50
Oct. 4	25	52½	Oct. 3	,,	1 50
Nov. 1	25	42½	Nov. 5	,,	1 50
Dec. 2	25	45	Dec. 2	,,	2 —
1826			1826		
Jan. 3	25	52½	Jan. 4	,,	4 —
Feb. 3	25	62½	Feb. 4	,,	5 25
March 3	25	80	Mar. 3	,,	7 25
April 4	25	95	April 4	,,	10 —
May 2	25	87½	May 3	,,	9 —
June 2	25	82½	June 3	,,	8 —
July 4	25	85	July 3	,,	9 —
Aug. 1	25	90	Aug. 4	,,	9 50
Sept. 1	25	90	Sept. 4	,,	9 —
Oct. 3	25	85	Oct. 3	,,	7 75
Nov. 3	25	87½	Nov. 3	,,	6 —
Dec. 1	25	75	Dec. 4	,,	4 —
1827			1827		
Jan. 2	25	75	Jan. 4	,,	3 75
Feb. 2	25	75	Feb. 4	,,	4 —
March 2	25	65	Mar. 3	,,	4 —
April 3	25	75	April 4	,,	5 —
May 1	25	70	May 3	,,	5 —
June 1	25	70	June 1	,,	5 —
July 3	25	67½	July 3	,,	4 —
Aug. 3	25	57½	Aug. 3	,,	2 75
Sept. 4	25	55	Sept. 6	,,	2 75
Oct. 2	25	52½	Oct. 3	,,	3 —
Nov. 2	25	50	Nov. 4	,,	1 50
Dec. 4	25	40	Dec. 4	,,	2 —

APPENDIX A.—*continued.*

	Exchange in London at Three Months' Date.			At Paris.	
1828	Fr.	c.	1828	Pr. °/∞	Fr. c.
Jan. 1	25	50	Jan. 4	Premium on Gold	1 75
Feb. 1	25	42½	Feb. 4	,,	1 75
March 4	25	45	Mar. 3	,,	2 —
April 1	25	52½	April 5	,,	2 50
May 2	25	50	May 4	,,	2 50
June 3	25	52½	June 4	,,	3 —
July 1	25	55	July 4	,,	3 50
Aug. 1	25	52½	Aug. 4	,,	4 —
Sept. 2	25	47½	Sept. 3	,,	6 50
Oct. 3	25	50	Oct. 3	,,	7 50
Nov. 4	25	52½	Nov. 5	,,	8 —
Dec. 2	25	55	Dec. 5	,,	4 —
1829			1829		
Jan. 2	25	50	Jan. 3	,,	8 50
Feb. 3	25	55	Feb. 4	,,	6 50
March 3	25	65	Mar. 4	,,	6 50
April 3	25	70	April 4	,,	8 25
May 1	25	72½	May 4	,,	7 75
June 2	25	77½	June 3	,,	13 —
July 3	25	85	July 4	,,	13 —
Aug. 4	25	82½	Aug. 6	,,	11 75
Sept. 1	25	82½	Sept. 3	,,	9 50
Oct. 2	25	90	Oct. 2	,,	14 —
Nov. 3	25	95	Nov. 2	,,	16 25
Dec. 1	26	—	Dec. 2	,,	15 50
1830			1830		
Jan. 1	25	97½	Jan. 4	,,	10 —
Feb. 2	25	87½	Feb. 4	,,	13 —
March 2	26	—	Mar. 2	,,	16 50
April 2	25	95	April 2	,,	12 75
May 4	25	85	May 6	,,	10 50
June 1	25	70	June 5	,,	9 —
July 2	25	77½	July 6	,,	10 —
Aug. 3	25	67½	Aug 5	,,	10 —
Sept. 3	25	65	Sept. 3	,,	7 50
Oct. 1	25	65	Oct. 5	,,	4 —
Nov. 2	25	60	Nov. 4	,,	7 —
Dec. 3	25	60	Dec. 4	,,	8 —

APPENDIX A.—*continued.*

	Exchange in London at Three Months' Date.		At Paris.	
1831	Fr.	c.	1831	Pr. °/∞ Fr. c.
Jan. 4	25	45	Jan. 4	Premium on Gold 3 —
Feb. 1	25	37½	Feb. 4	,, 6 —
March 1	25	37½	Mar. 4	,, 12 50
April 1	25	47½	April 4	,, 11 —
May 3	25	37½	May 2	,, 4 —
June 3	25	40	June 5	,, 6 —
July 1	25	37½	July 4	,, 6 50
Aug. 2	25	35	Aug. 4	,, 7 —
Sept. 2	25	37½	Sept. 5	,, 4 —
Oct. 4	25	40	Oct. 5	,, 3 —
Nov. 1	25	42½	Nov. 4	,, 1 75
Dec. 2	25	50	Dec. 5	,, 3 75
1832			1832	
Jan. 3	25	62½	Jan. 4	,, 7 —
Feb. 3	25	60	Feb. 3	,, 5 —
March 2	25	75	Mar. 2	,, 10 —
April 3	25	95	April 4	,, 13 50
May 1	25	90	May 4	,, 15 50
June 1	25	97½	June 6	,, 17 —
July 3	26	—	J ly 4	,, 18 —
Aug. 3	26	05	Aug. 4	,, 21 —
Sept. 4	25	97½	Sept. 5	,, 20 50
Oct. 2	26	—	Oct. 2	,, 19 50
Nov. 2	26	—	Nov. 3	,, 18 —
Dec. 4	25	90	Dec. 5	,, 16 —
1833			1833	
Jan. 1	26	02½	Jan 2	,, 18 —
Feb. 5	25	95	Feb. 6	,, 18 —
March 1	26	—	Mar. 5	,, 20 —
April 2	25	97½	April 3	,, 17 —
May 3	25	97½	May 4	,, 18 —
June 4	25	97½	June 5	,, 17 50
July 2	25	92½	July 3	,, 15 50
Aug. 2	25	80	Aug. 3	,, 15 —
Sept. 3	25	80	Sept. 4	,, 19 50
Oct. 1	25	72½	Oct. 2	,, 16 —
Nov. 1	25	70	Nov. 2	,, 12 —
Dec. 3	25	65	Dec. 7	,, 11 25

APPENDIX A.—*continued.*

	Exchange in London at Three Months' Date.		At Paris.	
1834	Fr.	c.	1834	Pr. °/∞ Fr. c.
Jan. 3	25	62½	Jan. 4	Premium on Gold 9 —
Feb. 4	25	57½	Feb. 5	,, 7 25
March 4	25	52½	Mar. 7	,, 7 50
April 1	25	62½	April 2	,, 6 —
May 2	25	65	May 3	,, 9 —
June 3	25	65	June 3	,, 7 25
July 1	25	65	July 5	,, 8 75
Aug. 1	25	60	Aug. 2	,, 7 55
Sept. 2	25	65	Sept. 2	,, 7 50
Oct. 3	25	67½	Oct. 7	,, 7 50
Nov. 4	25	67½	Nov. 6	,, 4 50
Dec. 2	25	65	Dec. 4	,, 4 60
1835			1835	
Jan. 2	25	67½	Jan. 4	,, 4 50
Feb. 3	25	62½	Feb. 8	,, 5 —
March 3	25	67½	Mar. 5	,, 5 25
April 3	25	82½	April 4	,, 9 —
May 1	25	70	May 2	,, 10 75
June 2	25	82½	June 3	,, 10 50
July 3	25	80	July 4	,, 12 —
Aug. 4	25	87½	Aug. 8	,, 11 50
Sept. 4	25	80	Sept. 5	,, 10 25
Oct. 2	25	85	Oct. 3	,, 11 —
Nov. 3	25	87½	Nov. 5	,, 13 —
Dec. 1	25	87½	Dec. 2	,, 13 25
1836			1836	
Jan. 1	25 for money	90	Jan. 2	,, 12 50
Feb. 2	25	80	Feb. 3	,, 10 50
March 1	25	85	Mar. 2	,, 10 75
April 5	25	82½	April 6	,, 11 50
May 3	25	75	May 5	,, 14 —
June 3	25	75	June 8	,, 16 25
July 1	25	72½	July 9	,, 14 50
Aug. 2	25	67½	Aug. 3	,, 12 —
Sept. 2	25	60	Sept. 5	,, 8 25
Oct. 4	25	65	Oct. 4	,, 9 50
Nov. 1	25	67½	Nov. 2	,, 8 75
Dec. 2	25	80	Dec. 5	,, 10 —

APPENDIX A.—*continued.*

	Exchange in London at Three Months' Date.			At Paris.	
1837	Fr.	c.	1837	Pr. °/∞	Fr. c.
Jan. 3	25	77½	Jan. 7	Premium on Gold	9 50
Feb. 3	25	65	Feb. 5	,,	10 50
March 3	25	72½	Mar. 5	,,	9 —
April 4	25	90	April 6	,,	12 —
May 2	25	80	May 4	,,	9 —
June 2	25	75	June 5	,,	7 50
July 4	25	87½	July 5	,,	11 50
Aug. 1	25	75	Aug. 6	,,	7 —
Sept. 1	25	77½	Sept. 3	,,	8 —
Oct. 3	25	80	Oct. 5	,,	9 —
Nov. 3	25	80	Nov. 5	,,	9 50
Dec. 1	25	75	Dec. 10	,,	7 50
1838			1838		
Jan. 2	25	85	Jan. 1	,,	8 75
Feb. 2	25	75	Feb. 1	,,	9 25
March 2	25	82½	Mar. 1	,,	9 —
April 3	25	77½	April 1	,,	8 75
May 1	25	80	May 2	,,	8 50
June 1	25	80	June 2	,,	8 50
July 3	25	70	July 5	,,	11 —
Aug. 3	25	75	Aug. 4	,,	8 —
Sept. 4	25	70	Sept. 5	,,	7 25
Oct. 2	25	72½	Oct. 5	,,	8 —
Nov. 2	25	70	Nov. 3	,,	8 25
Dec. 4	25	62½	Dec. 1	,,	8 50
1839			1839		
Jan. 1	25	50	Jan. 2	,,	8 —
Feb. 1	25 for money	50	Feb. 2	,,	8 —
March 1	25	45	Mar. 2	,,	8 50
April 2	25	47½	April 3	,,	8 —
May 3	25	50	May 6	,,	10 —
June 4	25	60	June 1	,,	10 —
July 2	25	47½	July 3	,,	8 —
Aug. 2	25	52½	Aug. 3	,,	8 —
Sept. 3	25	62½	Sept. 4	,,	8 —
Oct. 1	25	60	Oct. 2	,,	8 —
Nov. 1	25	60	Nov. 2	,,	7 50
Dec. 3	25	60	Dec. 4	,,	10 —

APPENDIX A.—*continued.*

	Exchange in London at Three Months' Date.		At Paris.		
1840	Fr.	c.	1840	Pr. °/₀₀	Fr. c.
Jan. 3	25	60	Jan. 4	Premium on Gold	8 —
Feb. 4	25	52½	Feb. 11	,,	6 —
March 3	25	55	Mar. 5	,,	6 50
April 3	25	50	April 4	,,	7 50
May 1	25	47½	May 4	,,	8 —
June 5	25	50	June 8	,,	10 —
July 3	25	55	July 4	,,	9 50
Aug. 4	25	50	Aug. 6	,,	7 50
Sept. 1	25	42½	Sept. 2	,,	6 50
Oct. 2	25	35	Oct. 3	,,	5 50
Nov. 3	25	45	Nov. 4	,,	4 —
Dec. 1	25	55	Dec. 5	,,	4 —
1841			1841		
Jan. 5	25	52½	Jan. 6	,,	3 75
Feb. 2	25	50	Feb. 6	,,	4 75
March 2	25	60	Mar. 3	,,	5 —
April 3	25	67½	April 3	,,	7 50
May 4	25	60	May 5	,,	8 50
June 1	25	60	June 2	,,	10 —
July 2	25	65	July 3	,,	6 50
Aug. 3	25	57½	Aug. 4	,,	7 —
Sept. 3	25	65	Sept. 6	,,	6 50
Oct. 1	25	65	Oct. 2	,,	8 50
Nov. 2	25	65	Nov. 6	,,	5 50
Dec. 3	25	70	Dec. 4	,,	6 —
1842			1842		
Jan. 4	25	75	Jan. 5	,,	6 —
Feb. 1	25	72½	Feb. 2	,,	6 50
March 1	25	82½	Mar. 2	,,	9 50
April 1	25	82½	April 2	,,	10 25
May 3	25	80	May 4	,,	11 50
June 3	25	75	June 4	,,	9 50
July 1	25	75	July 2	,,	8 —
Aug. 2	25	67½	Aug. 2	,,	8 —
Sept. 2	25	75	Sept. 7	,,	8 —
Oct. 4	25	82½	Oct. 5	,,	10 —
Nov. 1	25	85	Nov. 2	,,	12 —
Dec. 2	25	82½	Dec. 3	,,	12 —

APPENDIX A.—*continued.*

	Exchange in London at Three Months' Date.			At Paris.	
1843	Fr.	c.	1843	Pr. °/∞	Fr. c.
Jan. 3	25	90	Jan. 4	Premium on Gold	13 50
Feb. 3	25	82½	Feb. 4	,,	11 —
March 3	25	82½	Mar. 4	,,	12 25
April 4	25	85	April 5	,,	13 —
May 2	25	87½	May 3	,,	13 75
June 2	25	87½	June 3	,,	14 —
July 4	25	87½	July 4	,,	13 59
Aug. 1	25	77½	Aug. 2	,,	12 —
Sept. 1	25	80	Sept. 2	,,	13 —
Oct. 3	25	85	Oct. 4	,,	14 —
Nov. 3	25	82½	Nov. 4	,,	13 50
Dec. 1	25	87½	Dec. 2	,,	15 —
1844			1844		
Jan. 2	25	82½	Jan. 2	,,	13 50
Feb. 2	25	72½	Feb. 3	,,	10 —
March 1	25	80	Mar. 2	,,	13 —
April 2	25	82½	April 3	,,	14 —
May 3	25	72½	May 4	,,	12 —
June 4	25	70	June 5	,,	12 50
July 2	25	67½	July 3	,,	12 —
Aug. 2	25	67½	Aug. 3	,,	9 50
Sept. 3	25	67½	Sept. 3	,,	9 50
Oct. 1	25	72½	Oct. 1	,,	11 —
Nov. 1	25	80	Nov. 2	,,	11 50
Dec. 3	25	80	Dec. 5	,,	12 50
1845			1845		
Jan. 3	25	82½	Jan. 4	,,	12 50
Feb. 4	25	85	Feb. 4	,,	13 —
March 4	25	97½	Mar. 4	,,	16 —
April 1	25	95	April 2	,,	18 50
May 2	25	97½	May 3	,,	19 —
June 3	26	—	June 3	,,	19 50
July 1	25	92½	July 2	,,	17 —
Aug. 1	25	75	Aug. 4	,,	11 —
Sept. 2	25	87½	Sept. 2	,,	13 50
Oct. 3	25	87½	Oct. 4	,,	12 —
Nov. 4	25	87½	Nov. 5	,,	12 —
Dec. 2	25	92½	Dec. 6	,,	12 —

APPENDIX A.—*continued.*

	Exchange in London at Three Months' Date.			At Paris.	
1846	Fr.	c.	1846	Pr. °/∞	Fr. c.
Jan. 2	25	85	Jan. 3	Premium on Gold	11 50
Feb. 3	25	90	Feb. 4	,,	11 50
March 3	25	90	Mar. 3	,,	13 —
April 3	25	97½	April 6	,,	15 50
May 1	25	97½	May 2	,,	17 —
June 2	25	95	June 2	,,	16 50
July 3	25	95	July 4	,,	16 —
Aug. 4	26	—	Aug. 5	,,	16 50
Sept. 1	25	97½	Sept. 1	,,	16 50
Oct. 2	26	—	Oct. 2	,,	16 50
Nov. 3	25	85	Nov. 7	,,	16 —
Dec. 1	25	80	Dec. 2	,,	17 —
1847			1847		
Jan. 1	25	70	Jan. 4	,,	13 —
Feb. 2	25	60	Feb. 3	,,	11 —
March 2	25	60	Mar. 3	,,	10 50
April 1	25	75	April 5	,,	11 50
May 4	26	20	May 5	,,	16 50
June 1	25	87½	June 1	,,	16 50
July 2	25	77½	July 3	,,	14 50
Aug. 3	25	70	Aug. 5	,,	10 50
Sept. 3	25	65	Sept. 9	,,	8 50
Oct. 1	25	85	Oct. 2	,,	8 —
Nov. 2	26	05	Nov. 3	,,	19 —
Dec. 3	25	95	Dec. 9	,,	14 —

APPENDIX B.

THE BIMETALLIC DEBATE OF 1830.

1.—*Extract from* "Hansard," vol. xxv., *June to July*, 1830, pp. 109–111.

The Currency.] Mr. ATTWOOD:—My hon. friend and colleague (Mr. Baring), in that very able paper which contains his evidence before the Committee of Privy Council on Coins in 1828, gives an explanation precisely similar. It is this: "If gold and silver were concurrent legal tenders at the old Mint regulations, silver would at present be the practical standard, as the debtor always acquits himself in the cheapest metal he is enabled to do by law." My hon. colleague found no difficulty in piercing the mystery of those terms which perplex the hon. member for the City. The double standard is an optional standard; and that view of it, as it works in practice according to the evidence of the two authorities I have quoted, agrees precisely with the intention and meaning of the law itself, from the first introduction of two metals as money in this kingdom. I have here the terms of the first Act which legalised gold money, in the reign of Edward III., when coins of gold were for the first time to any extent circulated. That Act uses almost the very words which my hon. colleague has adopted in describing the practical working of the double standard. "And where any agreement had been made"—by agree-

ment being signified a contract taking the nature of a debt—" where any agreement had been made, it should be at the option of the purchaser to pay money of gold or of silver, as he should think fit." And this option given by the law to the debtor has continued, I believe, without any interruption, to be the law of the Mint, and a part of the standard, from the period I have quoted down to the Act of 1816, for establishing a silver coinage, when that option was, for the first time, taken away, and the debtor compelled to pay his debts in gold, as soon as the Bank Restriction Act should cease—which it did by the Act of 1819. But I will show what the result of the double standard will be in its operation when again re-established. Let it be assumed that my hon. friend the Member for London (Mr. Ward) is in possession of an old mortgage on a landed estate which he desires to call up; the money was advanced, I shall assume, before the Restriction Act; lent in the double standard; the lender advancing the cheapest of the two metals, and knowing that the law would allow the debtor to pay also in whichever should be the cheapest metal; and all mortgages which have dates before 1819 were either founded on this optional standard, or on the still cheaper standard of the Restriction Act. The mortgage is called in. By that single standard, now, for the first time, made law—that standard the simplicity of which is so intelligible to the hon. Member—he is enabled to compel his debtor to pay gold money of £3. 17*s.* 10½*d.* an ounce; which, when he carries to the bullion-market, he finds of the full intrinsic value of £3. 17*s.* 10½*d.* in gold, and perhaps somewhat more; but which if he sell for silver bullion, will give him five per cent. more silver than the debt paid in the ancient coin of the realm would give him, according to the law of the standard suspended in 1797; and he thus, by the abolition of the legitimate standard, has obtained an unjust advantage of five per cent., to the equal injury,

unjustly inflicted, of his debtor. Now suppose the legitimate standard re-established, that double standard, which the hon. Member finds it so difficult to understand, let him be satisfied that his debtor will find no such difficulty, he will see at once through the mystery. The debtor will no longer pa gold money as now compelled; he will pay in silver money, of the ancient legal coin of 5*s.* 2*d.* the ounce; which, when the hon. Member carries to the bullion-market, he will be able to dispose of at no more than 4*s.* 11*d.* the ounce; he will lose 5 per cent., which his debtor will gain; or, in other words, will have to give up an advantage of 5 per cent., which the present law has unjustly, and in violation of the faith of contracts, given to all creditors over all debtors. My hon. friend will thus, I think, be enabled to discover the meaning of the term "double standard," though he may not be satisfied of its propriety; neither is that a question which the Legislature has now, or had in 1816, or in 1819, the right to interfere with. It might, originally, have been just or unjust, reasonable or unreasonable, that debtors should have the power of discharging their engagements, either in one money or the other, as one became cheaper than the other: but this was a matter for consideration when that power was given. In the time of Edward III., of Queen Elizabeth, of King William, or of George I., it was matter for decision; but having been decided, the power having been secured by law, that law forming a part of the standard and of the Mint, and being as absolutely a part of our standard as the weight or fineness of the coin forms an essential part of it, that power cannot be taken away from the contracting parties without a violation of faith and justice.

2.—*Extract from* "Hansard," vol. xxv., *June to July*, 1830, pp. 155–7.

The Currency.] Mr. Herries said that the hon. Member (Mr. Attwood), in the very able speech with which he had opened this discussion, and the hon. Member for Shaftesbury, who had followed him, had, in his opinion, taken an entirely wrong view of the cause of the thin attendance of Members, when they attributed that thin attendance to a want of feeling on the part of the House to the wants and wishes of the country. In his opinion, the absence of hon. Members during the speeches of those two gentlemen arose from a conviction in the minds of a majority of the House—and he believed that the majority of the country entertained the same conviction—that this question of the currency was now finally set at rest, and that any motion that any hon. Member might think proper to submit on the subject would not have the effect of producing any change whatsoever. Those two hon. Members might depend upon it, that if the majority of the House thought there was the slightest probability of this motion ending in an alteration of the currency, the House would be crowded by the fullest possible attendance of Members, who would be drawn down for the express purpose of preventing such alteration. When he said that the hon. Member (Mr. Attwood) had made an able speech, he did not mean to say that that hon. Member had said anything new upon the subject. For the benefit of those who had not heard the hon. Member's speech, he would just observe that the hon. Member had merely repeated (with great ability, certainly, and with still greater pains) all that he had said upon former occasions; re-stating the same facts, and re-urging the same arguments; but introducing not a single new fact, nor a single new argument. The main question raised by the hon. Member for Callington

(Mr. Attwood) *was, whether we should recur to the double standard—for it was the double standard*, and not a double standard, as hon. members would quickly perceive. The position which the hon. Member had endeavoured to maintain, was not that we should have the two precious metals in circulation—but that we should *have the two metals in circulation at certain fixed proportions*, which condition must render the execution of the hon. Member's proposition strictly impossible. Let him not be supposed to be mis-stating or overstating the argument of the hon. Member. He called upon the House to bear in mind that it was an essential part of the hon. Member's argument, that the two metals should circulate in the proportions of 1798. The hon. Member said in so many words: "*Raise the depreciated silver to the same proportion to gold as that in which it stood in* 1798." Not to detain the House with details upon a part of the question which did not call for them, it would be sufficient for him to observe, that it was perfectly well known that the proportion in which these two metals interchanged now in the markets of the world, was essentially different from the proportions of 1798. In fact the hon. gentleman had himself admitted this: nay, the hon. gentleman had gone further, and told them that the difference between the two was as much as five per cent. This was not quite correct; the difference was not so great; but take it to be as the hon. gentleman had stated it, and to what result did it lead them? Why, the hon gentleman, ingenious as he was—practical as he boasted himself to be—had gravely and seriously recommended that the Legislature should make gold and silver equally a legal tender in this country at the old Mint prices, although, in the very same breath, the hon. gentleman acknowledged that these metals differed in value from those prices, as much as five per cent. *He would venture to say* that such a proposal was never before seriously made. The hon. gentleman had, with great pains and

minuteness, traced the history of our currency, and had told them how our ancestors had been obliged from time to time to adjust the value of these two metals, in order to keep them both legal tenders. Indeed, this was the whole object of Sir Isaac Newton's tables; but the hon. gentleman derided the wisdom of Sir Isaac Newton, and, in defiance of all these facts, which by his speech he had proved he was not ignorant of, he had said, "Let the two metals be a common tender, and let the debtor pay in which he pleases." Now, what, of absolute necessity, must be the first effect of such a measure as this? The hon. gentleman had told them—and it seemed to him (Mr. Herries) to be anything but a recommendation to the measure—*that every individual who owed money would be enabled to pay five per cent. less than he was at present engaged to pay.* This would, of course, be quite true, if the debtor had the opportunity given him: but there was a difficulty in practice here, which he was surprised the other hon. Member for Callington (Mr. Baring) had not pointed out to his hon. colleague. Suppose the Resolutions of the hon. gentleman to be agreed to, what would be the inevitable result? Why, it would be proclaimed to-morrow from one end of the country to the other—he need not specify how—that this House had come to a resolution the effect of which might be shortly stated thus—*namely, that every man who had claims payable upon demand, every man who held notes of small or great value, every man who had debts outstanding, would, if he secured the amount of what was due to him before this Resolution passed into law, get the whole of his money; whereas, if he delayed beyond that period, he could only get* 95*l. for every* 100*l.* It was terrible to reflect upon the consequences which must follow. What would become of the Bank of England?—what would become of every banking-house in the kingdom?—what would become of all debtors who were liable to pay upon demand all that they owed? Would not all transactions of commerce be

suspended, and the whole country present one continued scene of confusion, and consternation and ruin, when the House of Commons proclaimed to all who had debts due to them, that if they did not collect them on the instant, they would assuredly be losers to the amount of five per cent.? But if this scheme was really practicable, as it evidently was not, let them next consider what was called the claim of justice; in which the hon. Member who opened the discussion had, very much to his surprise, been followed by the other hon. Member for Callington (Mr. Baring). Both these hon. Members had appeared to think that, previous to 1797, men could discharge their debts in silver or in gold at pleasure. Now this was not the fact.

3.—*Extract from* "Hansard," vol. xxv., *June to July*, 1830, pp. 168–70.

The Currency.] Sir R. PEEL said he should not detain the House many minutes, and whenever he made such a promise he invariably kept his word. The extraordinary abuse, however, which the hon. Member for Callington had so liberally bestowed on the Bill with which his name was connected, he thought would be sufficient to justify him in making a few observations; and, first, he begged leave to express his lively sense of the obligation which he owed to that hon. Member for having at length brought forward what he called his practical measure, as by doing so he had certainly that night contributed more to the settlement of the question than by all the merely theoretical speeches which he had been delivering for years. Ever since 1819 had the hon. gentleman been dealing out diatribes and invectives against the policy on which the Government had then acted, while he kept in the background his own notions as to what it behoved the Government to have done if it wished to relinquish the

obnoxious and denounced system of paper-money not payable in gold. He had now, therefore, fairly abandoned declamation, and concocted a practical measure, which amounted to neither more nor less than a plan to enable every person to pay a debt of £100, with £96, deducting four per cent. He confessed he felt some surprise at seeing the hon. Member take the course which he was doing, as this was no proposal for a double standard, his object being merely to recur to the standard established by Sir Isaac Newton one hundred and twelve years ago. It was impossible that the scheme suggested could be productive of any good whatever. He was willing, for the sake of argument, to concede that the Bill of 1819 had been the means of effecting all the injury which its opponents had alleged it to have produced; but even assuming that to be true, the hon. Member would do still further injury to those who were supposed to have been injured by the measure of 1819. Many, relying on the solemn resolutions and assurances of Parliament, would have wound up all their accounts prior to 1819, submitting to the loss which they had then incurred, and now, therefore, might stand in the relation of creditor, and as such would sustain new injury, instead of experiencing any redress. But the proposition, in fact, carried its own refutation with it at the very outset, for it could not be acted on before a month from the present time, so that the creditor might clearly take advantage of the interval. He was sorry to hear hon. Members speak of opening this wearisome subject once more next Session, because it ought now to be left at rest if ever. Four changes had taken place in the currency during the last thirty years, and it was surely at length time to try the effect of a continued adherence to one system. The system at present in operation he was confident presented as few objectionable features as any other that could be proposed, and had been strongly recommended by the first Lord Liverpool, while

the former system was yet in healthy existence. *The notion of a double standard was totally fallacious, and would be found impracticable in effect*, nor had it been ever for a moment entertained by Mr. Locke, or any others who had advocated a silver standard. It was now ten years since the measure alluded to had been the law of the country, and engagements and contracts had been entered into which it would be the worst of policy to unsettle or disturb, particularly as it was now impossible to administer the redress required.

4.—*Extract from* "Hansard," vol. i., *October to December*, 1830, pp. 1068–9.

The Currency.] Mr. Attwood took that opportunity to ask the noble Lord (Althorp) whether it was the intention of the Government to propose any inquiry into the public distress, in connection with the change of the currency, or to adopt any measure of legislation to heal the wounds occasioned by the mischievous tampering with the currency by the Legislature since 1819.

Lord Althorp replied that it was not the intention of his Majesty's Government to propose any inquiry into the expediency of altering the present plan of our currency. The honourable gentleman would be perfectly right, with his view of the subject, to bring it forward for the consideration of Parliament; and whenever he did so, it was to be hoped that he would state explicitly what his object really was, and on what grounds he and his honourable friends were of opinion that the existing system of our currency could be advantageously altered; and whether it ought to be done by an increase of paper, by a restriction in the amount of cash payments, or by any new regulation with reference to the value of the metallic currency. For himself he would say, that, after having considered the subject long and attentively, *he*

was perfectly satisfied that it would be utterly impossible to alter the value of our money, without producing an effect on the commerce of the country that, with reference not only to our exchanges with foreign countries, but to our domestic affairs, must be, in the highest degree, mischievous and destructive. *It was of the utmost importance that the measure of value should remain fixed*, and he, for one, therefore, would not consent to any further alteration in our monetary system.

5.—*Extract from* "Hansard," vol. i., *October to December*, 1830, pp. 1102–3.

Lord ALTHORP:—It had been said that Sir R. Peel's Bill had been a cause of the distress—he would not deny that it had had some such effect; but it was necessary to look to the consequences which would now follow from any change of that measure. What would be the result if this great commercial country were left without any fixed standard of value? To what had all the mischief now felt been originally owing, but to the depreciation of the standard of value, and to repeated tamperings with the currency? At the time when that depreciation took place, there was no intention to reduce the currency. But to do so advisedly was the declared intention of the hon. gentleman. But such a proposition had never been carried into effect in any country without producing the most disastrous consequences. It was a measure to which his Majesty's Ministers would never accede. They would endeavour by all possible means (as they had explained) to relieve the distress; but should they fail to effect that, he (Lord Althorp) would not be the man to recommend that House to tamper with the currency.

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